Factor each expression completely.

Answers

1) $-\dfrac{3}{12}b + \dfrac{3}{12} =$ _____

1. _____

2. _____

2) $-\dfrac{4}{24}c - \dfrac{8}{42} =$ _____

3. _____

4. _____

3) $-\dfrac{14}{27}d + \dfrac{8}{12} =$ _____

5. _____

6. _____

4) $-\dfrac{3}{30}e + \dfrac{6}{25} =$ _____

7. _____

8. _____

5) $-\dfrac{3}{81}f + \dfrac{6}{63} =$ _____

9. _____

10. _____

6) $-\dfrac{8}{42}g - \dfrac{12}{35} =$ _____

7) $\dfrac{8}{32}h + \dfrac{8}{48} =$ _____

8) $-\dfrac{4}{64}j - \dfrac{28}{32} =$ _____

9) $-\dfrac{4}{12}k + \dfrac{6}{9} =$ _____

10) $-\dfrac{4}{36}m - \dfrac{4}{63} =$ _____
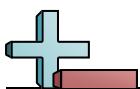
Name:

Factor each expression completely.

Answers

1)
$$-\frac{3}{12}b + \frac{3}{12} = \underline{\quad -\frac{3}{12}(\frac{1}{1}b - \frac{1}{1}) \quad}$$

2)
$$-\frac{4}{24}c - \frac{8}{42} = \underline{\quad -\frac{4}{6}(\frac{1}{4}c + \frac{2}{7}) \quad}$$

3)
$$-\frac{14}{27}d + \frac{8}{12} = \underline{\quad -\frac{2}{3}(\frac{7}{9}d - \frac{4}{4}) \quad}$$

4)
$$-\frac{3}{30}e + \frac{6}{25} = \underline{\quad -\frac{3}{5}(\frac{1}{6}e - \frac{2}{5}) \quad}$$

5)
$$-\frac{3}{81}f + \frac{6}{63} = \underline{\quad -\frac{3}{9}(\frac{1}{9}f - \frac{2}{7}) \quad}$$

6)
$$-\frac{8}{42}g - \frac{12}{35} = \underline{\quad -\frac{4}{7}(\frac{2}{6}g + \frac{3}{5}) \quad}$$

7)
$$\frac{8}{32}h + \frac{8}{48} = \underline{\quad \frac{8}{16}(\frac{1}{2}h + \frac{1}{3}) \quad}$$

8)
$$-\frac{4}{64}j - \frac{28}{32} = \underline{\quad -\frac{4}{32}(\frac{1}{2}j + \frac{7}{1}) \quad}$$

9)
$$-\frac{4}{12}k + \frac{6}{9} = \underline{\quad -\frac{2}{3}(\frac{2}{4}k - \frac{3}{3}) \quad}$$

10)
$$-\frac{4}{36}m - \frac{4}{63} = \underline{\quad -\frac{4}{9}(\frac{1}{4}m + \frac{1}{7}) \quad}$$

Answers

1. $-\frac{3}{12}(\frac{1}{1}b - \frac{1}{1})$

2. $-\frac{4}{6}(\frac{1}{4}c + \frac{2}{7})$

3. $-\frac{2}{3}(\frac{7}{9}d - \frac{4}{4})$

4. $-\frac{3}{5}(\frac{1}{6}e - \frac{2}{5})$

5. $-\frac{3}{9}(\frac{1}{9}f - \frac{2}{7})$

6. $-\frac{4}{7}(\frac{2}{6}g + \frac{3}{5})$

7. $\frac{8}{16}(\frac{1}{2}h + \frac{1}{3})$

8. $-\frac{4}{32}(\frac{1}{2}j + \frac{7}{1})$

9. $-\frac{2}{3}(\frac{2}{4}k - \frac{3}{3})$

10. $-\frac{4}{9}(\frac{1}{4}m + \frac{1}{7})$

Factor each expression completely.

1) $\dfrac{16}{48}b + \dfrac{28}{48} = $ _____

1. _____

2. _____

2) $-\dfrac{2}{24}c - \dfrac{4}{40} = $ _____

3. _____

4. _____

3) $\dfrac{6}{63}d + \dfrac{3}{36} = $ _____

5. _____

6. _____

4) $\dfrac{8}{48}e + \dfrac{4}{32} = $ _____

7. _____

8. _____

5) $-\dfrac{2}{45}f - \dfrac{16}{20} = $ _____

9. _____

10. _____

6) $\dfrac{10}{64}g + \dfrac{12}{72} = $ _____

7) $\dfrac{3}{16}h + \dfrac{3}{24} = $ _____

8) $\dfrac{10}{36}j + \dfrac{8}{54} = $ _____

9) $-\dfrac{4}{25}k - \dfrac{2}{45} = $ _____

10) $\dfrac{4}{16}m + \dfrac{4}{32} = $ _____

Name:

Factor each expression completely.

Answers

1) $\dfrac{16}{48}b + \dfrac{28}{48} =$ ____$\dfrac{4}{48}(\dfrac{4}{1}b + \dfrac{7}{1})$____

2) $-\dfrac{2}{24}c - \dfrac{4}{40} =$ ____$-\dfrac{2}{8}(\dfrac{1}{3}c + \dfrac{2}{5})$____

3) $\dfrac{6}{63}d + \dfrac{3}{36} =$ ____$\dfrac{3}{9}(\dfrac{2}{7}d + \dfrac{1}{4})$____

4) $\dfrac{8}{48}e + \dfrac{4}{32} =$ ____$\dfrac{4}{16}(\dfrac{2}{3}e + \dfrac{1}{2})$____

5) $-\dfrac{2}{45}f - \dfrac{16}{20} =$ ____$-\dfrac{2}{5}(\dfrac{1}{9}f + \dfrac{8}{4})$____

6) $\dfrac{10}{64}g + \dfrac{12}{72} =$ ____$\dfrac{2}{8}(\dfrac{5}{8}g + \dfrac{6}{9})$____

7) $\dfrac{3}{16}h + \dfrac{3}{24} =$ ____$\dfrac{3}{8}(\dfrac{1}{2}h + \dfrac{1}{3})$____

8) $\dfrac{10}{36}j + \dfrac{8}{54} =$ ____$\dfrac{2}{18}(\dfrac{5}{2}j + \dfrac{4}{3})$____

9) $-\dfrac{4}{25}k - \dfrac{2}{45} =$ ____$-\dfrac{2}{5}(\dfrac{2}{5}k + \dfrac{1}{9})$____

10) $\dfrac{4}{16}m + \dfrac{4}{32} =$ ____$\dfrac{4}{16}(\dfrac{1}{1}m + \dfrac{1}{2})$____

1. ____$\dfrac{4}{48}(\dfrac{4}{1}b + \dfrac{7}{1})$____

2. ____$-\dfrac{2}{8}(\dfrac{1}{3}c + \dfrac{2}{5})$____

3. ____$\dfrac{3}{9}(\dfrac{2}{7}d + \dfrac{1}{4})$____

4. ____$\dfrac{4}{16}(\dfrac{2}{3}e + \dfrac{1}{2})$____

5. ____$-\dfrac{2}{5}(\dfrac{1}{9}f + \dfrac{8}{4})$____

6. ____$\dfrac{2}{8}(\dfrac{5}{8}g + \dfrac{6}{9})$____

7. ____$\dfrac{3}{8}(\dfrac{1}{2}h + \dfrac{1}{3})$____

8. ____$\dfrac{2}{18}(\dfrac{5}{2}j + \dfrac{4}{3})$____

9. ____$-\dfrac{2}{5}(\dfrac{2}{5}k + \dfrac{1}{9})$____

10. ____$\dfrac{4}{16}(\dfrac{1}{1}m + \dfrac{1}{2})$____

Math

2

1-10 | 90 | 80 | 70 | 60 | 50 | 40 | 30 | 20 | 10 | 0

Factoring Expressions

Factor each expression completely.

1) $-\dfrac{3}{36}b - \dfrac{15}{8} = $ _____

2) $-\dfrac{4}{40}c + \dfrac{12}{30} = $ _____

3) $-\dfrac{8}{42}d - \dfrac{12}{36} = $ _____

4) $\dfrac{2}{30}e + \dfrac{2}{20} = $ _____

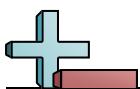**5)** $\dfrac{3}{56}f - \dfrac{12}{21} = $ _____

6) $-\dfrac{12}{20}g + \dfrac{9}{28} = $ _____

7) $\dfrac{14}{54}h + \dfrac{2}{30} = $ _____

8) $\dfrac{16}{42}j + \dfrac{4}{24} = $ _____

9) $-\dfrac{12}{36}k + \dfrac{12}{18} = $ _____

10) $-\dfrac{6}{28}m - \dfrac{3}{42} = $ _____

Name:

Factor each expression completely.

Answers

1)

$-\dfrac{3}{36}b - \dfrac{15}{8}$ = $-^3\!/_4(^1\!/_9b + ^5\!/_2)$

1. $-^3\!/_4(^1\!/_9b + ^5\!/_2)$

2. $-^4\!/_{10}(^1\!/_4c - ^3\!/_3)$

2)

$-\dfrac{4}{40}c + \dfrac{12}{30}$ = $-^4\!/_{10}(^1\!/_4c - ^3\!/_3)$

3. $-^4\!/_6(^2\!/_7d + ^3\!/_6)$

4. $^2\!/_{10}(^1\!/_3e + ^1\!/_2)$

3)

$-\dfrac{8}{42}d - \dfrac{12}{36}$ = $-^4\!/_6(^2\!/_7d + ^3\!/_6)$

5. $^3\!/_7(^1\!/_8f - ^4\!/_3)$

6. $-^3\!/_4(^4\!/_5g - ^3\!/_7)$

4)

$\dfrac{2}{30}e + \dfrac{2}{20}$ = $^2\!/_{10}(^1\!/_3e + ^1\!/_2)$

7. $^2\!/_6(^7\!/_9h + ^1\!/_5)$

8. $^4\!/_6(^4\!/_7j + ^1\!/_4)$

5)

$\dfrac{3}{56}f - \dfrac{12}{21}$ = $^3\!/_7(^1\!/_8f - ^4\!/_3)$

9. $-^{12}\!/_{18}(^1\!/_2k - ^1\!/_1)$

10. $-^3\!/_{14}(^2\!/_2m + ^1\!/_3)$

6)

$-\dfrac{12}{20}g + \dfrac{9}{28}$ = $-^3\!/_4(^4\!/_5g - ^3\!/_7)$

7)

$\dfrac{14}{54}h + \dfrac{2}{30}$ = $^2\!/_6(^7\!/_9h + ^1\!/_5)$

8)

$\dfrac{16}{42}j + \dfrac{4}{24}$ = $^4\!/_6(^4\!/_7j + ^1\!/_4)$

9)

$-\dfrac{12}{36}k + \dfrac{12}{18}$ = $-^{12}\!/_{18}(^1\!/_2k - ^1\!/_1)$

10)

$-\dfrac{6}{28}m - \dfrac{3}{42}$ = $-^3\!/_{14}(^2\!/_2m + ^1\!/_3)$

1-10 | 90 | 80 | 70 | 60 | 50 | 40 | 30 | 20 | 10 | 0

Name: _____

Factor each expression completely.

1) $-\dfrac{6}{35}b - \dfrac{12}{40} = $ _____

2) $\dfrac{4}{20}c + \dfrac{4}{25} = $ _____

3) $-\dfrac{20}{49}d - \dfrac{16}{21} = $ _____

4) $\dfrac{4}{28}e - \dfrac{4}{42} = $ _____

5) $\dfrac{4}{15}f - \dfrac{4}{40} = $ _____

6) $\dfrac{6}{27}g - \dfrac{6}{54} = $ _____

7) $-\dfrac{2}{24}h + \dfrac{4}{42} = $ _____

8) $-\dfrac{12}{30}j - \dfrac{16}{12} = $ _____

9) $\dfrac{14}{56}k - \dfrac{6}{14} = $ _____

10) $\dfrac{4}{20}m + \dfrac{12}{40} = $ _____
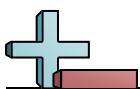
1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

Name:

Factor each expression completely.

Answers

1)
$$-\frac{6}{35}b - \frac{12}{40} = \underline{\quad -{}^6\!/_5({}^1\!/_7b + {}^2\!/_8) \quad}$$

1. $\underline{\quad -{}^{\mathbf{6}}\!/_{\mathbf{5}}({}^{\mathbf{1}}\!/_{\mathbf{7}}\mathbf{b} + {}^{\mathbf{2}}\!/_{\mathbf{8}}) \quad}$

2. $\underline{\quad {}^{\mathbf{4}}\!/_{\mathbf{5}}({}^{\mathbf{1}}\!/_{\mathbf{4}}\mathbf{c} + {}^{\mathbf{1}}\!/_{\mathbf{5}}) \quad}$

2)
$$\frac{4}{20}c + \frac{4}{25} = \underline{\quad {}^4\!/_5({}^1\!/_4c + {}^1\!/_5) \quad}$$

3. $\underline{\quad -{}^{\mathbf{4}}\!/_{\mathbf{7}}({}^{\mathbf{5}}\!/_{\mathbf{7}}\mathbf{d} + {}^{\mathbf{4}}\!/_{\mathbf{3}}) \quad}$

4. $\underline{\quad {}^{\mathbf{4}}\!/_{\mathbf{14}}({}^{\mathbf{1}}\!/_{\mathbf{2}}\mathbf{e} - {}^{\mathbf{1}}\!/_{\mathbf{3}}) \quad}$

3)
$$-\frac{20}{49}d - \frac{16}{21} = \underline{\quad -{}^4\!/_7({}^5\!/_7d + {}^4\!/_3) \quad}$$

5. $\underline{\quad {}^{\mathbf{4}}\!/_{\mathbf{5}}({}^{\mathbf{1}}\!/_{\mathbf{3}}\mathbf{f} - {}^{\mathbf{1}}\!/_{\mathbf{8}}) \quad}$

6. $\underline{\quad {}^{\mathbf{6}}\!/_{\mathbf{27}}({}^{\mathbf{1}}\!/_{\mathbf{1}}\mathbf{g} - {}^{\mathbf{1}}\!/_{\mathbf{2}}) \quad}$

4)
$$\frac{4}{28}e - \frac{4}{42} = \underline{\quad {}^4\!/_{14}({}^1\!/_2e - {}^1\!/_3) \quad}$$

7. $\underline{\quad -{}^{\mathbf{2}}\!/_{\mathbf{6}}({}^{\mathbf{1}}\!/_{\mathbf{4}}\mathbf{h} - {}^{\mathbf{2}}\!/_{\mathbf{7}}) \quad}$

8. $\underline{\quad -{}^{\mathbf{4}}\!/_{\mathbf{6}}({}^{\mathbf{3}}\!/_{\mathbf{5}}\mathbf{j} + {}^{\mathbf{4}}\!/_{\mathbf{2}}) \quad}$

5)
$$\frac{4}{15}f - \frac{4}{40} = \underline{\quad {}^4\!/_5({}^1\!/_3f - {}^1\!/_8) \quad}$$

9. $\underline{\quad {}^{\mathbf{2}}\!/_{\mathbf{14}}({}^{\mathbf{7}}\!/_{\mathbf{4}}\mathbf{k} - {}^{\mathbf{3}}\!/_{\mathbf{1}}) \quad}$

10. $\underline{\quad {}^{\mathbf{4}}\!/_{\mathbf{20}}({}^{\mathbf{1}}\!/_{\mathbf{1}}\mathbf{m} + {}^{\mathbf{3}}\!/_{\mathbf{2}}) \quad}$

6)
$$\frac{6}{27}g - \frac{6}{54} = \underline{\quad {}^6\!/_{27}({}^1\!/_1g - {}^1\!/_2) \quad}$$

7)
$$-\frac{2}{24}h + \frac{4}{42} = \underline{\quad -{}^2\!/_6({}^1\!/_4h - {}^2\!/_7) \quad}$$

8)
$$-\frac{12}{30}j - \frac{16}{12} = \underline{\quad -{}^4\!/_6({}^3\!/_5j + {}^4\!/_2) \quad}$$

9)
$$\frac{14}{56}k - \frac{6}{14} = \underline{\quad {}^2\!/_{14}({}^7\!/_4k - {}^3\!/_1) \quad}$$

10)
$$\frac{4}{20}m + \frac{12}{40} = \underline{\quad {}^4\!/_{20}({}^1\!/_1m + {}^3\!/_2) \quad}$$

1-10 | 90 | 80 | 70 | 60 | 50 | 40 | 30 | 20 | 10 | 0

Name:

Factor each expression completely.

1) $-\dfrac{16}{25}b - \dfrac{4}{10} = $ _____

1. _____

2. _____

2) $\dfrac{8}{45}c - \dfrac{16}{18} = $ _____

3. _____

3) $\dfrac{8}{21}d + \dfrac{8}{49} = $ _____

4. _____

5. _____

4) $-\dfrac{4}{15}e - \dfrac{2}{35} = $ _____

6. _____

7. _____

5) $\dfrac{2}{12}f - \dfrac{2}{32} = $ _____

8. _____

9. _____

6) $\dfrac{3}{18}g + \dfrac{3}{18} = $ _____

10. _____

7) $-\dfrac{8}{36}h + \dfrac{12}{36} = $ _____

8) $\dfrac{28}{40}j + \dfrac{8}{25} = $ _____

9) $\dfrac{2}{42}k + \dfrac{6}{35} = $ _____

10) $\dfrac{2}{42}m - \dfrac{10}{18} = $ _____

1-10 | 90 | 80 | 70 | 60 | 50 | 40 | 30 | 20 | 10 | 0

Name:

Factor each expression completely.

Answers

1) $-\dfrac{16}{25}b - \dfrac{4}{10} =$ _____ $-\frac{4}{5}(\frac{4}{5}b + \frac{1}{2})$ _____

2) $\dfrac{8}{45}c - \dfrac{16}{18} =$ _____ $\frac{8}{9}(\frac{1}{5}c - \frac{2}{2})$ _____

3) $\dfrac{8}{21}d + \dfrac{8}{49} =$ _____ $\frac{8}{7}(\frac{1}{3}d + \frac{1}{7})$ _____

4) $-\dfrac{4}{15}e - \dfrac{2}{35} =$ _____ $-\frac{2}{5}(\frac{2}{3}e + \frac{1}{7})$ _____

5) $\dfrac{2}{12}f - \dfrac{2}{32} =$ _____ $\frac{2}{4}(\frac{1}{3}f - \frac{1}{8})$ _____

6) $\dfrac{3}{18}g + \dfrac{3}{18} =$ _____ $\frac{3}{18}(\frac{1}{1}g + \frac{1}{1})$ _____

7) $-\dfrac{8}{36}h + \dfrac{12}{36} =$ _____ $-\frac{4}{36}(\frac{2}{1}h - \frac{3}{1})$ _____

8) $\dfrac{28}{40}j + \dfrac{8}{25} =$ _____ $\frac{4}{5}(\frac{7}{8}j + \frac{2}{5})$ _____

9) $\dfrac{2}{42}k + \dfrac{6}{35} =$ _____ $\frac{2}{7}(\frac{1}{6}k + \frac{3}{5})$ _____

10) $\dfrac{2}{42}m - \dfrac{10}{18} =$ _____ $\frac{2}{6}(\frac{1}{7}m - \frac{5}{3})$ _____

1. _____ $-\frac{4}{5}(\frac{4}{5}b + \frac{1}{2})$ _____

2. _____ $\frac{8}{9}(\frac{1}{5}c - \frac{2}{2})$ _____

3. _____ $\frac{8}{7}(\frac{1}{3}d + \frac{1}{7})$ _____

4. _____ $-\frac{2}{5}(\frac{2}{3}e + \frac{1}{7})$ _____

5. _____ $\frac{2}{4}(\frac{1}{3}f - \frac{1}{8})$ _____

6. _____ $\frac{3}{18}(\frac{1}{1}g + \frac{1}{1})$ _____

7. _____ $-\frac{4}{36}(\frac{2}{1}h - \frac{3}{1})$ _____

8. _____ $\frac{4}{5}(\frac{7}{8}j + \frac{2}{5})$ _____

9. _____ $\frac{2}{7}(\frac{1}{6}k + \frac{3}{5})$ _____

10. _____ $\frac{2}{6}(\frac{1}{7}m - \frac{5}{3})$ _____
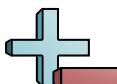
Name: _____

Factor each expression completely.

1) $-\dfrac{3}{10}b - \dfrac{3}{10} =$ _____

1. _____

2) $-\dfrac{3}{18}c - \dfrac{6}{42} =$ _____

2. _____

3. _____

3) $-\dfrac{24}{56}d + \dfrac{4}{24} =$ _____

4. _____

5. _____

4) $\dfrac{3}{20}e + \dfrac{6}{45} =$ _____

6. _____

7. _____

5) $-\dfrac{2}{18}f + \dfrac{2}{42} =$ _____

8. _____

9. _____

6) $\dfrac{8}{56}g - \dfrac{28}{14} =$ _____

10. _____

7) $-\dfrac{2}{9}h - \dfrac{4}{27} =$ _____

8) $-\dfrac{4}{20}j - \dfrac{2}{10} =$ _____

9) $-\dfrac{12}{54}k + \dfrac{16}{36} =$ _____

10) $\dfrac{16}{56}m - \dfrac{20}{72} =$ _____

Name:

Factor each expression completely.

1)

$$-\frac{3}{10}b - \frac{3}{10} = \underline{\quad -\frac{3}{10}(\frac{1}{1}b + \frac{1}{1}) \quad}$$

1. $\underline{\quad -\frac{3}{10}(\frac{1}{1}b + \frac{1}{1}) \quad}$

2. $\underline{\quad -\frac{3}{6}(\frac{1}{3}c + \frac{2}{7}) \quad}$

2)

$$-\frac{3}{18}c - \frac{6}{42} = \underline{\quad -\frac{3}{6}(\frac{1}{3}c + \frac{2}{7}) \quad}$$

3. $\underline{\quad -\frac{4}{8}(\frac{6}{7}d - \frac{1}{3}) \quad}$

4. $\underline{\quad \frac{3}{5}(\frac{1}{4}e + \frac{2}{9}) \quad}$

3)

$$-\frac{24}{56}d + \frac{4}{24} = \underline{\quad -\frac{4}{8}(\frac{6}{7}d - \frac{1}{3}) \quad}$$

5. $\underline{\quad -\frac{2}{6}(\frac{1}{3}f - \frac{1}{7}) \quad}$

6. $\underline{\quad \frac{4}{14}(\frac{2}{4}g - \frac{7}{1}) \quad}$

4)

$$\frac{3}{20}e + \frac{6}{45} = \underline{\quad \frac{3}{5}(\frac{1}{4}e + \frac{2}{9}) \quad}$$

7. $\underline{\quad -\frac{2}{9}(\frac{1}{1}h + \frac{2}{3}) \quad}$

8. $\underline{\quad -\frac{2}{10}(\frac{2}{2}j + \frac{1}{1}) \quad}$

5)

$$-\frac{2}{18}f + \frac{2}{42} = \underline{\quad -\frac{2}{6}(\frac{1}{3}f - \frac{1}{7}) \quad}$$

9. $\underline{\quad -\frac{4}{18}(\frac{3}{3}k - \frac{4}{2}) \quad}$

10. $\underline{\quad \frac{4}{8}(\frac{4}{7}m - \frac{5}{9}) \quad}$

6)

$$\frac{8}{56}g - \frac{28}{14} = \underline{\quad \frac{4}{14}(\frac{2}{4}g - \frac{7}{1}) \quad}$$

7)

$$-\frac{2}{9}h - \frac{4}{27} = \underline{\quad -\frac{2}{9}(\frac{1}{1}h + \frac{2}{3}) \quad}$$

8)

$$-\frac{4}{20}j - \frac{2}{10} = \underline{\quad -\frac{2}{10}(\frac{2}{2}j + \frac{1}{1}) \quad}$$

9)

$$-\frac{12}{54}k + \frac{16}{36} = \underline{\quad -\frac{4}{18}(\frac{3}{3}k - \frac{4}{2}) \quad}$$

10)

$$\frac{16}{56}m - \frac{20}{72} = \underline{\quad \frac{4}{8}(\frac{4}{7}m - \frac{5}{9}) \quad}$$

1-10	90	80	70	60	50	40	30	20	10	0

Factoring Expressions
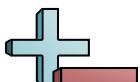
Factor each expression completely.

1) $\dfrac{16}{45}b + \dfrac{8}{45} = $ _____

2) $-\dfrac{8}{45}c + \dfrac{6}{36} = $ _____

3) $\dfrac{8}{63}d - \dfrac{16}{18} = $ _____

4) $\dfrac{24}{56}e - \dfrac{24}{14} = $ _____

5) $-\dfrac{4}{12}f + \dfrac{4}{27} = $ _____

6) $-\dfrac{6}{28}g + \dfrac{12}{36} = $ _____

7) $-\dfrac{4}{40}h - \dfrac{16}{30} = $ _____

8) $\dfrac{12}{63}j + \dfrac{4}{27} = $ _____

9) $\dfrac{12}{35}k - \dfrac{12}{28} = $ _____

10) $\dfrac{8}{72}m + \dfrac{24}{81} = $ _____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

1-10 | 90 | 80 | 70 | 60 | 50 | 40 | 30 | 20 | 10 | 0

Name:

Factor each expression completely.

Answers

1) $\dfrac{16}{45}b + \dfrac{8}{45} = $ ___$\dfrac{8}{45}(\dfrac{2}{1}b + \dfrac{1}{1})$___

1. ___$\dfrac{8}{45}(\dfrac{2}{1}b + \dfrac{1}{1})$___

2. ___$-\dfrac{2}{9}(\dfrac{4}{5}c - \dfrac{3}{4})$___

2) $-\dfrac{8}{45}c + \dfrac{6}{36} = $ ___$-\dfrac{2}{9}(\dfrac{4}{5}c - \dfrac{3}{4})$___

3. ___$\dfrac{8}{9}(\dfrac{1}{7}d - \dfrac{2}{2})$___

4. ___$\dfrac{24}{14}(\dfrac{1}{4}e - \dfrac{1}{1})$___

3) $\dfrac{8}{63}d - \dfrac{16}{18} = $ ___$\dfrac{8}{9}(\dfrac{1}{7}d - \dfrac{2}{2})$___

5. ___$-\dfrac{4}{3}(\dfrac{1}{4}f - \dfrac{1}{9})$___

6. ___$-\dfrac{6}{4}(\dfrac{1}{7}g - \dfrac{2}{9})$___

4) $\dfrac{24}{56}e - \dfrac{24}{14} = $ ___$\dfrac{24}{14}(\dfrac{1}{4}e - \dfrac{1}{1})$___

7. ___$-\dfrac{4}{10}(\dfrac{1}{4}h + \dfrac{4}{3})$___

8. ___$\dfrac{4}{9}(\dfrac{3}{7}j + \dfrac{1}{3})$___
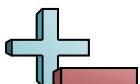
5) $-\dfrac{4}{12}f + \dfrac{4}{27} = $ ___$-\dfrac{4}{3}(\dfrac{1}{4}f - \dfrac{1}{9})$___

9. ___$\dfrac{12}{7}(\dfrac{1}{5}k - \dfrac{1}{4})$___

10. ___$\dfrac{8}{9}(\dfrac{1}{8}m + \dfrac{3}{9})$___

6) $-\dfrac{6}{28}g + \dfrac{12}{36} = $ ___$-\dfrac{6}{4}(\dfrac{1}{7}g - \dfrac{2}{9})$___

7) $-\dfrac{4}{40}h - \dfrac{16}{30} = $ ___$-\dfrac{4}{10}(\dfrac{1}{4}h + \dfrac{4}{3})$___

8) $\dfrac{12}{63}j + \dfrac{4}{27} = $ ___$\dfrac{4}{9}(\dfrac{3}{7}j + \dfrac{1}{3})$___

9) $\dfrac{12}{35}k - \dfrac{12}{28} = $ ___$\dfrac{12}{7}(\dfrac{1}{5}k - \dfrac{1}{4})$___

10) $\dfrac{8}{72}m + \dfrac{24}{81} = $ ___$\dfrac{8}{9}(\dfrac{1}{8}m + \dfrac{3}{9})$___

Math

1-10 | 90 | 80 | 70 | 60 | 50 | 40 | 30 | 20 | 10 | 0

Factor each expression completely.

1) $\dfrac{4}{24\,b} - \dfrac{2}{42} =$ _____

2) $-\dfrac{4}{12\,c} - \dfrac{4}{16} =$ _____

3) $\dfrac{24}{64\,d} - \dfrac{20}{40} =$ _____

4) $\dfrac{14}{36\,e} + \dfrac{10}{36} =$ _____

5) $\dfrac{4}{24\,f} + \dfrac{4}{24} =$ _____

6) $\dfrac{2}{15\,g} - \dfrac{4}{30} =$ _____

7) $-\dfrac{4}{25\,h} - \dfrac{8}{35} =$ _____

8) $\dfrac{6}{28\,j} + \dfrac{6}{28} =$ _____

9) $\dfrac{2}{12\,k} - \dfrac{2}{54} =$ _____

10) $\dfrac{4}{27\,m} - \dfrac{2}{63} =$ _____
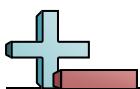
1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

Name:

Answers

Factor each expression completely.

1) $\dfrac{4}{24}b - \dfrac{2}{42} = $ _____ $\frac{2}{6}(\frac{2}{4}b - \frac{1}{7})$ _____

1. _____ $\frac{2}{6}(\frac{2}{4}b - \frac{1}{7})$ _____

2. _____ $-\frac{4}{4}(\frac{1}{3}c + \frac{1}{4})$ _____

2) $-\dfrac{4}{12}c - \dfrac{4}{16} = $ _____ $-\frac{4}{4}(\frac{1}{3}c + \frac{1}{4})$ _____

3. _____ $\frac{4}{8}(\frac{6}{8}d - \frac{5}{5})$ _____

4. _____ $\frac{2}{36}(\frac{7}{1}e + \frac{5}{1})$ _____

3) $\dfrac{24}{64}d - \dfrac{20}{40} = $ _____ $\frac{4}{8}(\frac{6}{8}d - \frac{5}{5})$ _____

5. _____ $\frac{4}{24}(\frac{1}{1}f + \frac{1}{1})$ _____

6. _____ $\frac{2}{15}(\frac{1}{1}g - \frac{2}{2})$ _____

4) $\dfrac{14}{36}e + \dfrac{10}{36} = $ _____ $\frac{2}{36}(\frac{7}{1}e + \frac{5}{1})$ _____

7. _____ $-\frac{4}{5}(\frac{1}{5}h + \frac{2}{7})$ _____

8. _____ $\frac{6}{28}(\frac{1}{1}j + \frac{1}{1})$ _____

5) $\dfrac{4}{24}f + \dfrac{4}{24} = $ _____ $\frac{4}{24}(\frac{1}{1}f + \frac{1}{1})$ _____

9. _____ $\frac{2}{6}(\frac{1}{2}k - \frac{1}{9})$ _____

10. _____ $\frac{2}{9}(\frac{2}{3}m - \frac{1}{7})$ _____

6) $\dfrac{2}{15}g - \dfrac{4}{30} = $ _____ $\frac{2}{15}(\frac{1}{1}g - \frac{2}{2})$ _____

7) $-\dfrac{4}{25}h - \dfrac{8}{35} = $ _____ $-\frac{4}{5}(\frac{1}{5}h + \frac{2}{7})$ _____

8) $\dfrac{6}{28}j + \dfrac{6}{28} = $ _____ $\frac{6}{28}(\frac{1}{1}j + \frac{1}{1})$ _____

9) $\dfrac{2}{12}k - \dfrac{2}{54} = $ _____ $\frac{2}{6}(\frac{1}{2}k - \frac{1}{9})$ _____

10) $\dfrac{4}{27}m - \dfrac{2}{63} = $ _____ $\frac{2}{9}(\frac{2}{3}m - \frac{1}{7})$ _____

Math

8

1-10 | 90 | 80 | 70 | 60 | 50 | 40 | 30 | 20 | 10 | 0

Name: _____

Factor each expression completely.

1) $\dfrac{3}{30}b - \dfrac{3}{36} =$ _____

2) $\dfrac{3}{12}c + \dfrac{3}{42} =$ _____

3) $-\dfrac{3}{36}d + \dfrac{3}{72} =$ _____

4) $-\dfrac{12}{56}e - \dfrac{4}{48} =$ _____

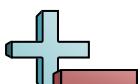**5)** $\dfrac{8}{42}f - \dfrac{10}{56} =$ _____

6) $\dfrac{15}{54}g + \dfrac{15}{45} =$ _____

7) $-\dfrac{16}{42}h - \dfrac{20}{24} =$ _____

8) $\dfrac{4}{15}j - \dfrac{8}{30} =$ _____

9) $-\dfrac{8}{40}k - \dfrac{2}{24} =$ _____

10) $\dfrac{4}{21}m - \dfrac{6}{6} =$ _____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

1-10 | 90 | 80 | 70 | 60 | 50 | 40 | 30 | 20 | 10 | 0

Name:

Factor each expression completely.

Answers

1) $\dfrac{3}{30}b - \dfrac{3}{36} =$ ___$\frac{3}{6}(\frac{1}{5}b - \frac{1}{6})$___

1. ___$\frac{3}{6}(\frac{1}{5}b - \frac{1}{6})$___

2) $\dfrac{3}{12}c + \dfrac{3}{42} =$ ___$\frac{3}{6}(\frac{1}{2}c + \frac{1}{7})$___

2. ___$\frac{3}{6}(\frac{1}{2}c + \frac{1}{7})$___

3) $-\dfrac{3}{36}d + \dfrac{3}{72} =$ ___$-\frac{3}{36}(\frac{1}{1}d - \frac{1}{2})$___

3. ___$-\frac{3}{36}(\frac{1}{1}d - \frac{1}{2})$___

4) $-\dfrac{12}{56}e - \dfrac{4}{48} =$ ___$-\frac{4}{8}(\frac{3}{7}e + \frac{1}{6})$___

4. ___$-\frac{4}{8}(\frac{3}{7}e + \frac{1}{6})$___

5) $\dfrac{8}{42}f - \dfrac{10}{56} =$ ___$\frac{2}{14}(\frac{4}{3}f - \frac{5}{4})$___

5. ___$\frac{2}{14}(\frac{4}{3}f - \frac{5}{4})$___

6) $\dfrac{15}{54}g + \dfrac{15}{45} =$ ___$\frac{15}{9}(\frac{1}{6}g + \frac{1}{5})$___

6. ___$\frac{15}{9}(\frac{1}{6}g + \frac{1}{5})$___

7) $-\dfrac{16}{42}h - \dfrac{20}{24} =$ ___$-\frac{4}{6}(\frac{4}{7}h + \frac{5}{4})$___

7. ___$-\frac{4}{6}(\frac{4}{7}h + \frac{5}{4})$___

8) $\dfrac{4}{15}j - \dfrac{8}{30} =$ ___$\frac{4}{15}(\frac{1}{1}j - \frac{2}{2})$___

8. ___$\frac{4}{15}(\frac{1}{1}j - \frac{2}{2})$___

9) $-\dfrac{8}{40}k - \dfrac{2}{24} =$ ___$-\frac{2}{8}(\frac{4}{5}k + \frac{1}{3})$___

9. ___$-\frac{2}{8}(\frac{4}{5}k + \frac{1}{3})$___

10) $\dfrac{4}{21}m - \dfrac{6}{6} =$ ___$\frac{2}{3}(\frac{2}{7}m - \frac{3}{2})$___

10. ___$\frac{2}{3}(\frac{2}{7}m - \frac{3}{2})$___

1-10 | 90 | 80 | 70 | 60 | 50 | 40 | 30 | 20 | 10 | 0

Name: _____

Factor each expression completely.

1) $-\dfrac{8}{42}b + \dfrac{24}{18} = $ _____

1. _____

2. _____

2) $\dfrac{4}{24}c + \dfrac{2}{42} = $ _____

3. _____

3) $-\dfrac{8}{24}d + \dfrac{8}{24} = $ _____

4. _____

5. _____

4) $\dfrac{4}{28}e + \dfrac{2}{56} = $ _____

6. _____

7. _____

5) $-\dfrac{6}{20}f - \dfrac{6}{30} = $ _____

8. _____

9. _____
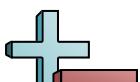
6) $-\dfrac{6}{20}g + \dfrac{9}{20} = $ _____

10. _____

7) $-\dfrac{3}{18}h + \dfrac{3}{18} = $ _____

8) $\dfrac{12}{48}j - \dfrac{10}{48} = $ _____

9) $\dfrac{3}{36}k + \dfrac{9}{18} = $ _____

10) $\dfrac{2}{12}m - \dfrac{2}{12} = $ _____

1-10 | 90 | 80 | 70 | 60 | 50 | 40 | 30 | 20 | 10 | 0
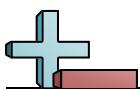
Factor each expression completely.

1) $-\frac{8}{42}b + \frac{24}{18} =$ $-\frac{8}{6}(\frac{1}{7}b - \frac{3}{3})$

2) $\frac{4}{24}c + \frac{2}{42} =$ $\frac{2}{6}(\frac{2}{4}c + \frac{1}{7})$

3) $-\frac{8}{24}d + \frac{8}{24} =$ $-\frac{8}{24}(\frac{1}{1}d - \frac{1}{1})$

4) $\frac{4}{28}e + \frac{2}{56} =$ $\frac{2}{28}(\frac{2}{1}e + \frac{1}{2})$

5) $-\frac{6}{20}f - \frac{6}{30} =$ $-\frac{6}{10}(\frac{1}{2}f + \frac{1}{3})$

6) $-\frac{6}{20}g + \frac{9}{20} =$ $-\frac{3}{20}(\frac{2}{1}g - \frac{3}{1})$

7) $-\frac{3}{18}h + \frac{3}{18} =$ $-\frac{3}{18}(\frac{1}{1}h - \frac{1}{1})$

8) $\frac{12}{48}j - \frac{10}{48} =$ $\frac{2}{48}(\frac{6}{1}j - \frac{5}{1})$

9) $\frac{3}{36}k + \frac{9}{18} =$ $\frac{3}{18}(\frac{1}{2}k + \frac{3}{1})$

10) $\frac{2}{12}m - \frac{2}{12} =$ $\frac{2}{12}(\frac{1}{1}m - \frac{1}{1})$