Multiplying and Dividing Powers of Ten

Name:

Solve each problem.

5.47 × 10⁴	**2.36 ÷ 10²**
5.47×10^4	$2.36 \div 10^2$

This is the same as saying:
$5.47 \times (10 \times 10 \times 10 \times 10)$
And because the base is 10 you can just move the decimal 4 places to the right to solve.

$$5\ 4\ 7\ 0\ 0\ .$$

$5.47 \times 10^4 = 54,700$

Division is the same way. Only instead of moving the decimal right, you move it left.

$$.0\ 2\ 3\ 6$$

You can also multiply a negative exponent, which means the same thing.

$2.36 \times 10^{-2} = 2.36 \div 10^2$

1) $5.3 \div 10^2$

2) 44.88×10^1

3) $1.59 \div 10^1$

4) 2.572×10^3

5) $4.35 \div 10^4$

6) 49.6×10^2

7) $4.42 \div 10^2$

8) 99.93×10^4

9) $773.645 \div 10^2$

10) 4.324×10^4

11) $673.4 \div 10^1$

12) 7.297×10^1

13) $547.46 \div 10^1$

14) 7.231×10^3

15) $442.167 \div 10^4$

16) 16.69×10^2

17) $5.73 \div 10^1$

18) 782.9×10^3

19) $86.43 \div 10^2$

20) 8.5×10^4

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____
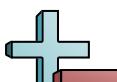
11. _____

12. _____

13. _____

14. _____

15. _____

16. _____

17. _____

18. _____

19. _____

20. _____

Math

www.CommonCoreSheets.com

5nbt2

1-10	95	90	85	80	75	70	65	60	55	50
11-20	45	40	35	30	25	20	15	10	5	0

Name:

Solve each problem.

$$5.47 \times 10^4$$
This is the same as saying:
$5.47 \times (10 \times 10 \times 10 \times 10)$
And because the base is 10 you can just move the decimal 4 places to the right to solve.

$$5\underset{\smile}{4\ 7\ 0\ 0}.$$

$$5.47 \times 10^4 = 54{,}700$$

$$2.36 \div 10^2$$
Division is the same way. Only instead of moving the decimal right, you move it left.

$$.0\underset{\smile}{2}3\,6$$

You can also multiply a negative exponent, which means the same thing.

$$2.36 \times 10^{-2} = 2.36 \div 10^2$$

1) $5.3 \div 10^2$

2) 44.88×10^1

3) $1.59 \div 10^1$

4) 2.572×10^3

5) $4.35 \div 10^4$

6) 49.6×10^2

7) $4.42 \div 10^2$

8) 99.93×10^4

9) $773.645 \div 10^2$

10) 4.324×10^4

11) $673.4 \div 10^1$

12) 7.297×10^1

13) $547.46 \div 10^1$

14) 7.231×10^3

15) $442.167 \div 10^4$

16) 16.69×10^2

17) $5.73 \div 10^1$

18) 782.9×10^3

19) $86.43 \div 10^2$

20) 8.5×10^4

#	Answer
1.	**0.053**
2.	**448.8**
3.	**0.159**
4.	**2,572**
5.	**0.000435**
6.	**4,960**
7.	**0.0442**
8.	**999,300**
9.	**7.73645**
10.	**43,240**
11.	**67.34**
12.	**72.97**
13.	**54.746**
14.	**7,231**
15.	**0.0442167**
16.	**1,669**
17.	**0.573**
18.	**782,900**
19.	**0.8643**
20.	**85,000**

Math

5nbt2

1-10	95	90	85	80	75	70	65	60	55	50
11-20	45	40	35	30	25	20	15	10	5	0