



## Function Machine - Determining Rule

Name: \_\_\_\_\_

Determine which number sentence best matches the function machine.

| In | Out |
|----|-----|
| 5  | 40  |
| 6  | 48  |
| 3  | 24  |
| 2  | 16  |
| 8  | 64  |

If each input is 'Q' which rule could the function machine be using?

- A.  $Q + 9$     B.  $Q \div 8$   
C.  $Q \times 8$     D.  $Q + 6$

| In | Out |
|----|-----|
| 88 | 86  |
| 11 | 9   |
| 38 | 36  |
| 41 | 39  |
| 64 | 62  |

If each input is 'Q' which rule could the function machine be using?

- A.  $Q \div 7$     B.  $Q - 10$   
C.  $Q - 2$     D.  $Q + 2$

| In | Out |
|----|-----|
| 20 | 2   |
| 60 | 6   |
| 50 | 5   |
| 30 | 3   |
| 80 | 8   |

If each input is 'Q' which rule could the function machine be using?

- A.  $Q - 4$     B.  $Q \div 10$   
C.  $Q - 10$     D.  $Q + 10$

| In | Out |
|----|-----|
| 1  | 8   |
| 78 | 85  |
| 19 | 26  |
| 30 | 37  |
| 56 | 63  |

If each input is 'Q' which rule could the function machine be using?

- A.  $Q \times 6$     B.  $Q \times 2$   
C.  $Q + 7$     D.  $Q + 7$

| In | Out |
|----|-----|
| 45 | 5   |
| 63 | 7   |
| 90 | 10  |
| 54 | 6   |
| 36 | 4   |

If each input is 'Q' which rule could the function machine be using?

- A.  $Q \div 9$     B.  $Q - 9$   
C.  $Q \div 9$     D.  $Q \div 8$

| In | Out |
|----|-----|
| 84 | 76  |
| 55 | 47  |
| 28 | 20  |
| 62 | 54  |
| 57 | 49  |

If each input is 'Q' which rule could the function machine be using?

- A.  $Q - 8$     B.  $Q \div 8$   
C.  $Q + 8$     D.  $Q \times 8$

| In | Out |
|----|-----|
| 8  | 72  |
| 6  | 54  |
| 4  | 36  |
| 5  | 45  |
| 3  | 27  |

If each input is 'Q' which rule could the function machine be using?

- A.  $Q \times 9$     B.  $Q + 9$   
C.  $Q + 10$     D.  $Q + 4$

| In | Out |
|----|-----|
| 6  | 36  |
| 4  | 24  |
| 10 | 60  |
| 5  | 30  |
| 2  | 12  |

If each input is 'Q' which rule could the function machine be using?

- A.  $Q + 5$     B.  $Q \times 6$   
C.  $Q - 6$     D.  $Q \times 6$

| In | Out |
|----|-----|
| 71 | 91  |
| 91 | 111 |
| 54 | 74  |
| 93 | 113 |
| 97 | 117 |

If each input is 'Q' which rule could the function machine be using?

- A.  $Q \times 7$     B.  $Q \div 20$   
C.  $Q + 20$     D.  $Q - 20$

Answers

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_



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- B.  $Q - 10$
- C.  $Q - 2$
- D.  $Q + 2$

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- C.  $Q - 10$
- D.  $Q + 10$

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- A.  $Q \times 6$
- B.  $Q \times 2$
- C.  $Q + 7$
- D.  $Q + 7$

| In | Out |
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- B.  $Q - 9$
- C.  $Q \div 9$
- D.  $Q \div 8$

| In | Out |
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| 84 | 76  |
| 55 | 47  |
| 28 | 20  |
| 62 | 54  |
| 57 | 49  |

If each input is 'Q' which rule could the function machine be using?

- A.  $Q - 8$
- B.  $Q \div 8$
- C.  $Q + 8$
- D.  $Q \times 8$

| In | Out |
|----|-----|
| 8  | 72  |
| 6  | 54  |
| 4  | 36  |
| 5  | 45  |
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If each input is 'Q' which rule could the function machine be using?

- A.  $Q \times 9$
- B.  $Q + 9$
- C.  $Q + 10$
- D.  $Q + 4$

| In | Out |
|----|-----|
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| 4  | 24  |
| 10 | 60  |
| 5  | 30  |
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If each input is 'Q' which rule could the function machine be using?

- A.  $Q + 5$
- B.  $Q \times 6$
- C.  $Q - 6$
- D.  $Q \times 6$

| In | Out |
|----|-----|
| 71 | 91  |
| 91 | 111 |
| 54 | 74  |
| 93 | 113 |
| 97 | 117 |

If each input is 'Q' which rule could the function machine be using?

- A.  $Q \times 7$
- B.  $Q \div 20$
- C.  $Q + 20$
- D.  $Q - 20$

### Answers

1. **C**2. **C**3. **B**4. **C**5. **A**6. **A**7. **A**8. **B**9. **C**