Integers, add and subtract — Within 20

Name: _____ Date: _____

Add or subtract the integers.

1. $-14 + 8 = -6$
2. $7 - 13 =$ ____
3. $-1 + 11 =$ ____
4. $0 - 17 =$ _____
5. $4 - 11 =$ ____
6. $-11 + 17 =$ ____
7. $-6 + 3 =$ ____
8. $7 - 9 =$ ____

Name: _____ Date: _____

Multiply or divide. Remember what two negative signs make.

1. $-18 \div (-3) = 6$
2. $-11 \times (-8) =$ ___
3. $99 \div (-9) =$ ___
4. $-48 \div (-12) =$ ___
5. $11 \times (-2) =$ ___
6. $-2 \times (-5) =$ ___
7. $10 \times (-7) =$ ___
8. $-54 \div (-6) =$ ___

Solving equations — To 50

Name: _____ Date: _____

Solve each equation for x.

1. $x + 41 = 49$ 8

2. $x + 11 = 36$ ___

3. $x - 5 = 34$ ___

4. $23 - x = 20$ ___

5. $29 - x = 28$ ___

6. $x + 8 = 37$ ___

7. $x - 14 = 35$ ___

8. $x + 8 = 20$ ___

Solving equations — To 50

Name: _____ Date: _____

Solve each equation for x.

1. $2x = 18$ 9

2. $2x = 20$ ____

3. $x \div 3 = 13$ ____

4. $2x = 50$ ____

5. $x \div 2 = 10$ ____

6. $x \div 10 = 4$ ____

7. $x \div 2 = 14$ ____

8. $7x = 35$ ____

Solving equations — To 50

Name: _____ Date: _____

Solve each equation for x.

1. $7x - 27 = 8$ 5

2. $2x - 8 = 20$ ___

3. $7x + 10 = 17$ ___

4. $4x + 8 = 36$ ___

5. $7x + 1 = 15$ ___

6. $2x + 1 = 31$ ___

7. $4x - 2 = 22$ ___

8. $2x - 38 = 10$ ___

Inequalities — To 50

Name: _____ Date: _____

Solve each one, then write >, <, ≥ or ≤ in the box.

1. $x + 5 \leq 31 \quad x \boxed{\leq} 26$

   $31 - 5 = 26$

   $x \leq 26$

2. $x + 12 \leq 18 \quad x \boxed{} 6$

3. $x + 9 \leq 13 \quad x \boxed{} 4$

4. $x + 6 \leq 41 \quad x \boxed{} 35$

5. $x + 7 > 17 \quad x \boxed{} 10$

6. $x + 8 > 25 \quad x \boxed{} 17$

7. $x - 9 \leq 15 \quad x \boxed{} 24$

8. $x - 5 > 26 \quad x \boxed{} 31$

Name: _____ Date: _____

Find the constant of proportionality for each table.

1

x	3	5	8	9
y	6	10	16	18

k → 2

2

x	3	6	7	9
y	27	54	63	81

k → ___

3

x	3	6	8	9
y	36	72	96	108

k → ___

4

x	2	7	8	9
y	6	21	24	27

k → ___

5

x	4	5	7	8
y	16	20	28	32

k → ___

6

x	4	5	7	8
y	44	55	77	88

k → ___

7

x	2	6	8	9
y	6	18	24	27

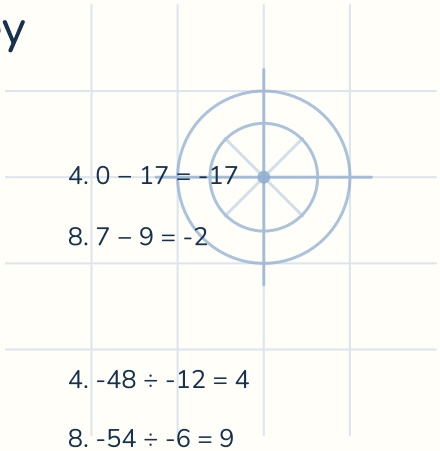
k → ___

8

x	2	4	6	8
y	20	40	60	80

k → ___

Power Pack · Integers and equations — Answer key



Integers

1. -14 + 8 = -6
2. 7 − 13 = -6
3. -1 + 11 = 10
4. 0 − 17 = -17
5. 4 − 11 = -7
6. -11 + 17 = 6
7. -6 + 3 = -3
8. 7 − 9 = -2

Integer × ÷

1. -18 ÷ -3 = 6
2. -11 × -8 = 88
3. 99 ÷ -9 = -11
4. -48 ÷ -12 = 4
5. 11 × -2 = -22
6. -2 × -5 = 10
7. 10 × -7 = -70
8. -54 ÷ -6 = 9

One-step: + and −

1. x + 41 = 49 → x = 8
2. x + 11 = 36 → x = 25
3. x − 5 = 34 → x = 39
4. 23 − x = 20 → x = 3
5. 29 − x = 28 → x = 1
6. x + 8 = 37 → x = 29
7. x − 14 = 35 → x = 49
8. x + 8 = 20 → x = 12

One-step: × and ÷

1. 2x = 18 → x = 9
2. 2x = 20 → x = 10
3. x ÷ 3 = 13 → x = 39
4. 2x = 50 → x = 25
5. x ÷ 2 = 10 → x = 20
6. x ÷ 10 = 4 → x = 40
7. x ÷ 2 = 14 → x = 28
8. 7x = 35 → x = 5

Two-step equations

1. 7x − 27 = 8 → x = 5
2. 2x − 8 = 20 → x = 14
3. 7x + 10 = 17 → x = 1
4. 4x + 8 = 36 → x = 7
5. 7x + 1 = 15 → x = 2
6. 2x + 1 = 31 → x = 15
7. 4x − 2 = 22 → x = 6
8. 2x − 38 = 10 → x = 24

Inequalities

1. x + 5 ≤ 31 → x ≤ 26
2. x + 12 ≤ 18 → x ≤ 6
3. x + 9 ≤ 13 → x ≤ 4
4. x + 6 ≤ 41 → x ≤ 35
5. x + 7 > 17 → x > 10
6. x + 8 > 25 → x > 17
7. x − 9 ≤ 15 → x ≤ 24
8. x − 5 > 26 → x > 31

Proportionality

1. x: 3, 5, 8, 9 y: 6, 10, 16, 18 → k = 2
2. x: 3, 6, 7, 9 y: 27, 54, 63, 81 → k = 9
3. x: 3, 6, 8, 9 y: 36, 72, 96, 108 → k = 12
4. x: 2, 7, 8, 9 y: 6, 21, 24, 27 → k = 3
5. x: 4, 5, 7, 8 y: 16, 20, 28, 32 → k = 4
6. x: 4, 5, 7, 8 y: 44, 55, 77, 88 → k = 11
7. x: 2, 6, 8, 9 y: 6, 18, 24, 27 → k = 3
8. x: 2, 4, 6, 8 y: 20, 40, 60, 80 → k = 10