Adding and Subtracting Integers Worksheet

Number and Quantity

Grades 6 to 8

Skill Questions

Name: ....

Date: ....

1
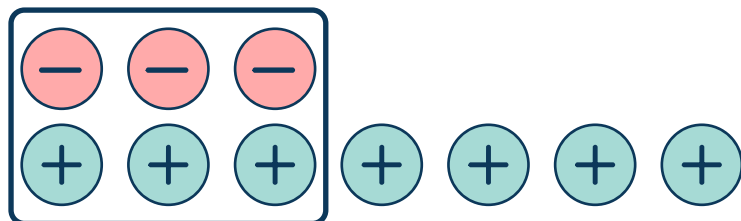
Write an equation to represent the model.

Answer

2

Write an equation to represent the model.

Answer

3

-8 -7 -6 -5 -4 -3 -2 -1 0

Write two equations to represent the model.

Answer

4

-1 0 1 2

Write two equations to represent the model.

Answer

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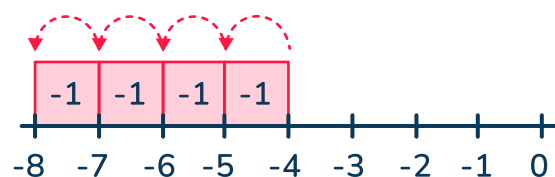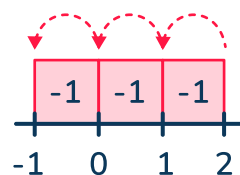
5 Show –5 + (–6) as a model.

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6   Write $-11 - 5$ as an addition expression.

Answer

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7   Write $9 + (-5)$ as a subtraction expression.

Answer

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8   Solve $-4 + (-13) = ?$

Answer

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9   Solve $-5 - (-8) = ?$

Answer

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10   Solve $3 - (-3) = ?$

Answer

Applied Questions

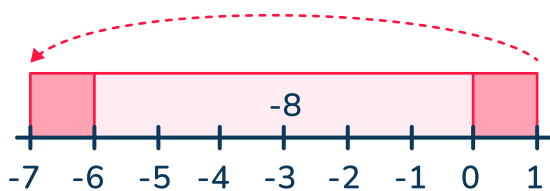**11** Fill in the missing integer. Then explain how you solved.

a. _____ − (−5) = 2

Answer

b. 8 + _____ = −4

Answer

12

Three students wrote expressions to represent the model.

- Jesse wrote 1 − 8
- Zeke wrote 1 + (−8)
- Jay wrote 1 − (−8)

Which expressions are correct? Explain.

Answer

13 The temperature was −8°F. It fell 5 degrees by noon. Write an equation to represent the temperature at noon.
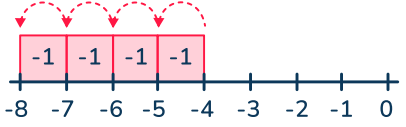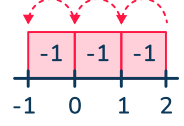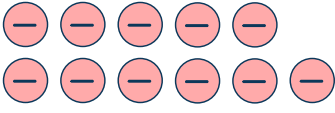
Answer
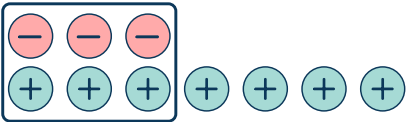
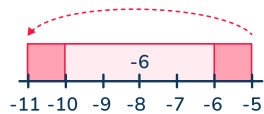**14** Hudson was at an elevation of 170 m. After hiking an hour, Hudson's elevation changed by $-80\,m$. What is Hudson's current elevation?

Answer

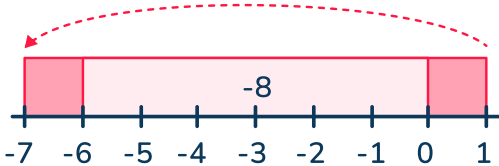**15** A whale was at $-23\,ft$ above sea level. It swam straight up and jumped out of the water, changing its sea level position by 28 ft. Write an equation to represent the whale's position when it jumped out of the water.

Answer

Answers

Question number	Question	Answers	Standard
1	Write an equation to represent the model.	$-3 + 7 = 4$	7.NS.A.1
2	Write an equation to represent the model.	$-5 - (-4) = -1$	7.NS.A.1
3	Write two equations to represent the model.	$-3 + (-4) = -7$ $-3 - 4 = -7$	7.NS.A.1
4	Write two equations to represent the model.	$2 + (-3) = -1$ $2 - 3 = -1$	7.NS.A.1
5	Show $-5 + (-6)$ as a model.	OR	7.NS.A.1
6	Write $-11 - 5$ as an addition expression.	$-11 + (-5)$	7.NS.A.1

Adding and Subtracting Integers Worksheet | Grades 6 to 8 | Answers

Question number	Question	Answers	Standard
7	Write 9 + (–5) as a subtraction expression.	9 – 5	7.NS.A.1
8	Solve –4 + (–13) = ?	–17	7.NS.A.1
9	Solve –5 – (–8) = ?	3	7.NS.A.1
10	Solve 3 – (–3) = ?	6	7.NS.A.1
11	Fill in the missing integer. Then explain how you solved. a. ____ – (–5) = 2 b. 8 + ____ = –4	a. Subtracting –5 is equal to adding 5. Since the answer is 2 and 5 was added, the missing number is –3. b. 8 is positive and the sum is negative. That means the number added was negative and had a magnitude that was 4 larger than 8. This means the missing number is –12.	7.NS.A.1
12	 Three students wrote expressions to represent the model. • Jesse wrote 1 – 8 • Zeke wrote 1 + (–8) • Jay wrote 1 – (–8) Which expressions are correct? Explain.	Jesse's expression is correct because the model starts at 1 and subtracts 8. Zeke's is also correct because adding –8 is equal to subtracting 8.	7.NS.A.1

Adding and Subtracting Integers Worksheet | Grades 6 to 8 | Answers

Question number	Question	Answers	Standard
13	The temperature was –8°F. It fell 5 degrees by noon. Write an equation to represent the temperature at noon.	$-8 - 5 = -13$ OR $-8 + (-5) = -13$	7.NS.A.3
14	Hudson was at an elevation of $170\ m$. After hiking an hour, Hudson's elevation changed by $-80\ m$. What is Hudson's current elevation?	$90m$	7.NS.A.3
15	A whale was at $-23\ ft$ above sea level. It swam straight up and jumped out of the water, changing its sea level position by $28\ ft$. Write an equation to represent the whale's position when it jumped out of the water.	$-23 + 28 = 5$	7.NS.A.3

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