

Integer Sign Quest

Use signs to calculate with confidence.

GRADE 6 • TEKS 6.3.D

6.3.D "add, subtract, multiply, and divide integers fluently; and"

NAME _____

DATE _____

SIGN RULES

For addition and subtraction, use the signs to decide whether to combine or compare distances from zero. For multiplication and division, matching signs make a positive answer, and different signs make a negative answer.

WORKED EXAMPLE

$$(-11) \times 13$$

1. The signs are different, so the product is negative.
2. Multiply the distances from zero: $11 \times 13 = 143$.
3. Attach the negative sign: -143 .

Answer: -143

PRACTICE 6 problems

1 $(-18) + 25$

ANSWER _____

2 $32 + (-47)$

ANSWER _____

3 $(-9) - 16$

ANSWER _____

4 $14 - (-19)$

ANSWER _____

5 $(-7) \times 8$

ANSWER _____

6 $(-72) \div (-9)$

ANSWER _____

APPLY IT Show your work

- 1** In a video game tournament, Kai earned 26 points in one round, lost 39 points in the next round, and earned 20 points in the last round. What was Kai's total change in points?

WORK SPACE

ANSWER _____

- 2** A school club has a debt of \$84. Seven club members agree to share the debt equally. What integer represents each member's share of the debt?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Evaluate: $[(-6) \times (-4)] - [35 \div (-5)]$

WORK SPACE AND ANSWER

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	$(-18) + 25$	7
2	$32 + (-47)$	-15
3	$(-9) - 16$	-25
4	$14 - (-19)$	33
5	$(-7) \times 8$	-56
6	$(-72) \div (-9)$	8

PART 2 • APPLY IT

1. **7 points** Add the signed point changes: $26 + (-39) + 20 = 7$. Kai's score increased by 7 points.
2. **-\$12** Represent the debt as -84 and divide equally: $-84 \div 7 = -12$. Each member's share is -\$12.

CHALLENGE

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Accept equivalent wording for the word-problem answers, such as "an increase of 7 points" and "owes \$12." Students should show a negative sign for each debt or loss value.