

2.2 Add and Subtract Real Numbers

PRACTICE

Evaluate each expression.

1. $14 + 9$ 23	2. $-12 - 7$ -19	3. $4 + (-6)$ $4 - 6 = -2$	4. $-10 - (-5)$ $-10 + 5 = -5$
5. $ -4 + (-7) $ $ -11 = 11$	6. $ -18 - 5 $ $ -23 = 23$	7. $34.125 + (-21.4)$ $34.125 - 21.4$ 12.725	8. $-21 - 3.5$ -24.5
9. $-\frac{7}{3} + \frac{2}{3}$ $-\frac{5}{3}$	10. $\frac{8}{9} - (-\frac{5}{9})$ $\frac{8}{9} + \frac{5}{9} = \frac{13}{9}$	11. $-\frac{4}{5} + (-\frac{2}{5})$ $-\frac{4}{5} - \frac{2}{5} = -\frac{6}{5}$	12. $\frac{1}{2} - \frac{3}{2}$ $-\frac{1}{2}$
13. $\frac{4}{5} \cdot \frac{2}{4} + \frac{3}{4} \cdot \frac{5}{5}$ $\frac{8}{20} + \frac{15}{20} = \frac{23}{20}$	14. $\frac{2}{7} \cdot \frac{2}{7} - \frac{5}{2} \cdot \frac{7}{7}$ $-\frac{4}{14} - \frac{35}{14} = -\frac{39}{14}$	15. $\frac{5}{5} \cdot \frac{7}{8} + (-\frac{2}{5}) \cdot \frac{8}{8}$ $-\frac{35}{40} - \frac{16}{40} = -\frac{51}{40}$	16. $\frac{4}{1} \cdot \frac{2}{1} - (-\frac{5}{4})$ $\frac{8}{4} + \frac{5}{4} = \frac{13}{4}$
17. $-3\frac{2}{7} - 1\frac{1}{2}$ $2 \cdot \frac{23}{7} - \frac{3 \cdot 7}{2 \cdot 7}$ $-\frac{46}{14} - \frac{21}{14} = -\frac{67}{14}$	18. $4\frac{2}{3} + (-3\frac{1}{6})$ $2 \cdot \frac{14}{3} - \frac{19}{6}$ $2 \cdot \frac{28}{6} - \frac{19}{6} = \frac{9}{6} = \frac{3}{2}$	19. $ 8 + (-5) + 7$ $ 3 + 7$ $3 + 7$ 10	20. $4 + \sqrt{16 + 9}$ $4 + \sqrt{25}$ $4 + 5$ 9

Circle the correct property.

21. $7 + 9 = 9 + 7$ Commutative Property of Addition	Associative Property of Addition	Neither	22. $7 + 9 + 6 = 7 + 15$ Commutative Property of Addition	Associative Property of Addition	Neither	23. $(8 + 3) + 1 = 8 + (3 + 1)$ Commutative Property of Addition	Associative Property of Addition	Neither
24. $a + (9 + b) = (a + 9) + b$ Commutative Property of Addition	Associative Property of Addition	Neither	25. $x + y = y + x$ Commutative Property of Addition	Associative Property of Addition	Neither	26. $4(2 + 5) = 8 + 20$ Commutative Property of Addition	Associative Property of Addition	Neither

Find the error.

27. Mr. Kelly refuses to believe that the associative property doesn't work for subtraction. He works the following problem to "prove" that it does work. He is wrong. Circle the mistake in his "proof". Correct his "proof" by showing that both sides are NOT equal to each other.

Correction

$$9 - (8 - 4)$$

$$9 - 4$$

$$\textcircled{5}$$

$$9 - (8 - 4) = (9 - 8) - 4$$

$$9 - 12 = 1 - 4$$

$$-3 = -3$$

5 doesn't equal -3

Evaluate each expression to determine if the answer is a rational number or irrational number.

28. $7 - \sqrt{49}$

$$7 - 7$$

$$\textcircled{0}$$

Rational

Irrational

29. $|9 - 12| + 2\frac{3}{4}$

$$|-3| + \frac{11}{4}$$

$$3 + \frac{11}{4} = \frac{12}{4} + \frac{11}{4} = \frac{23}{4}$$

Rational

Irrational

30. $12 - \sqrt{7 - 4}$

$$12 - \sqrt{3}$$

$$\approx 10.26794919\dots$$

Rational

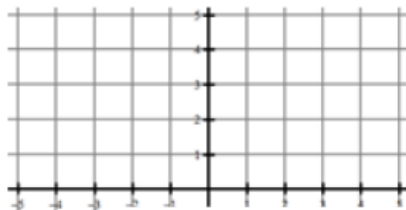
Irrational

SKILLZ REVIEW**GRAPH**

Plot the points:

1. A (-3, -4)

2. B (2, 0)



A •

SIMPLIFY

3. $\frac{-2-3}{0-6} = \frac{-5}{-6} = \frac{5}{6}$

4. $\frac{-5-(-3)}{3-8}$

ORDER OF OPERATIONS

5. $4 - 2(3)^2$

$$4 - 2(9)$$

$$4 - 18$$

$$\textcircled{-14}$$

6. $2 + 4(-3)$

For extra help watch the Skillz Review Video