

2.3 Multiply and Divide Real Numbers

PRACTICE

Evaluate each expression.			
1. $4 \cdot 9$ 36	2. $(-2)(-7)$ 14	3. $18 \div (-6)$ -3	4. $\frac{-10}{5}$ -2
5. $\left \frac{20}{4}\right = 5 = 5$	6. $ -8(5) = -40 = 40$	7. $4.25(-2.4)$ -10.2	8. $\frac{-7.2}{-3.5}$ $2.057\dots$
9. $-\frac{7}{3}\left(\frac{2}{3}\right) = \frac{-14}{9}$	10. $\frac{8}{9} \div \left(-\frac{5}{2}\right)$ $\frac{8}{9} \cdot \frac{-2}{5} = \frac{-16}{45}$	11. $-\frac{4}{5}\left(-\frac{2}{3}\right) = \frac{8}{15}$	12. $\frac{1}{8} \div \left(\frac{3}{2}\right)$ $\frac{1}{8} \cdot \frac{2}{3} = \frac{2}{24} = \frac{1}{12}$
13. $\left(\frac{2}{5}\right)\left(\frac{3}{4}\right) = \frac{6}{20} = \frac{3}{10}$	14. $\frac{-3}{1}\left(-\frac{5}{2}\right) = \frac{15}{2}$	15. $\left(4\frac{2}{3}\right) \div \left(-3\frac{1}{6}\right)$ $\frac{14}{3} \div \frac{-19}{6}$ $\frac{14}{3} \cdot \frac{-6}{19} = \frac{-84}{57} = \frac{-28}{19}$	16. $\frac{2}{1} \div \left(-\frac{5}{4}\right)$ $\frac{2}{1} \cdot \frac{-4}{5} = \frac{-8}{5}$
17. $2 8(-5) $ $2 -40 $ $2 40 $ $2 \cdot 40 = 80$	18. $3\left \frac{15}{-5}\right + 5$ $3 -3 + 5$ $3 \cdot 3 + 5$ $9 + 5 = 14$	19. $4\sqrt{9}$ $4 \cdot 3 = 12$	20. $-3\sqrt{4(9)}$ $-3\sqrt{36}$ $-3 \cdot 6 = -18$

Circle the correct property.		
21. $(8 \cdot 3)4 = 8(3 \cdot 4)$ Commutative Property of Multiplication Associative Property of Multiplication Neither	22. $7(2)6 = 7(12)$ Commutative Property of Multiplication Associative Property of Multiplication Neither	23. $7(9) = 9(7)$ Commutative Property of Multiplication Associative Property of Multiplication Neither
24. $a(9 \cdot b) = (a \cdot 9)b$ Commutative Property of Multiplication Associative Property of Multiplication Neither	25. $xy = yx$ Commutative Property of Multiplication Associative Property of Multiplication Neither	26. $4(2 \cdot 5) = 8 \cdot 20$ Commutative Property of Multiplication Associative Property of Multiplication Neither

Find the error.

27. Mr. Sullivan refuses to believe that the associative property doesn't work for division. 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.

$$16 \div \left(8 \div \frac{1}{2}\right) = (16 \div 8) \div \frac{1}{2}$$

$$16 \div 16 = 2 \div \frac{1}{2}$$

$$1 = 1$$

$2 \div \frac{1}{2}$
 $2 \cdot 2$
 4

$1 \neq 4$

Simplify the expression.

28. $\frac{6x-14}{2} = \frac{6x}{2} - \frac{14}{2}$

$3x - 7$

29. $\frac{9z-6}{-3} = \frac{9z}{-3} - \frac{6}{-3}$

$-3z + 2$

30. $\frac{-6p+15}{6} = \frac{-6p}{6} + \frac{15}{6}$

$-p + \frac{5}{2}$

31. $\frac{-10-24a}{-8} = \frac{-10}{-8} - \frac{24a}{-8}$

$\frac{5}{4} + 3a$

32. $\frac{36-27c}{9} = \frac{36}{9} - \frac{27c}{9}$

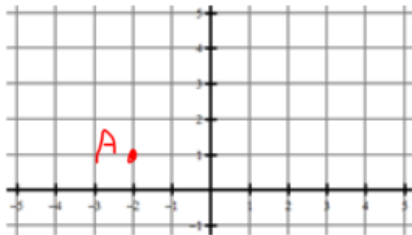
$4 - 3c$

SKILLZ REVIEW**GRAPH**

Plot the points:

1. A (-2, 1)

2. B (-3, 0)

**SIMPLIFY**

3. $\frac{7-10}{9-6} = \frac{-3}{3} = -1$

4. $\frac{12-(-2)}{5-2}$

ORDER OF OPERATIONS

5. $(-3)^2 - 4 + 7$

$9 - 4 + 7$

$5 + 7$

12

6. $\frac{12}{3} + 2(3) - 1$

For extra help watch the Skillz Review Video