

<p>What is the multiplicative inverse of <math>-\frac{5}{6}</math>?</p> <p>1. (1) 1 (3) <math>-\frac{6}{5}</math>  (2) <math>\frac{6}{5}</math> (4) <math>\frac{5}{6}</math></p>	<p>6. [Aug 1999, #7]  Which equation is an illustration of the additive identity property?</p> <p>(1) <math>x \cdot 1 = x</math> (3) <math>x - x = 0</math>  (2) <math>x + 0 = x</math> (4) <math>x \cdot \frac{1}{x} = 1</math></p>	<p>1. _____  2. _____</p>
<p>What is the additive inverse of <math>x^2</math>?</p> <p>2. (1) <math>x^2</math> (3) <math>-x^2</math>  (2) <math>x^{-2}</math> (4) <math>-x^{-2}</math></p>	<p>If <math>a</math>, <math>b</math>, and <math>c</math> are real numbers, the commutative property of addition states that</p> <p>7. (1) <math>(a + b) + c = c + (a + b)</math>  (2) <math>a(b + c) = ab + ac</math>  (3) <math>a(bc) = (ab)c</math>  (4) <math>(a + b) + c = a + (b + c)</math></p>	<p>3. _____  4. _____</p>
<p>3. If <math>x = -4</math> and <math>W = 2</math>, what is the value of <math>W - x^2</math>?</p>	<p>8. [Jun 2001, #8]  Which equation illustrates the distributive property for real numbers?</p> <p>(1) <math>\frac{1}{3} + \frac{1}{2} = \frac{1}{2} + \frac{1}{3}</math>  (2) <math>\sqrt{3} + 0 = \sqrt{3}</math>  (3) <math>(1.3 \times 0.07) \times 0.63 = 1.3 \times (0.07 \times 0.63)</math>  (4) <math>-3(5 + 7) = (-3)(5) + (-3)(7)</math></p>	<p>5. _____  6. _____</p>
<p>4. Simplify: <math>\frac{-10 + 9(-2)}{2 - 9}</math></p>	<p>9. [Jan 2003, #14]  Which equation illustrates the multiplicative identity element?</p> <p>(1) <math>x + 0 = x</math> (3) <math>x \cdot \frac{1}{x} = 1</math>  (2) <math>x - x = 0</math> (4) <math>x \cdot 1 = x</math></p>	<p>7. _____  8. _____</p>
<p>5. [Jun 2003, #6]  Tori computes the value of <math>8 \times 95</math> in her head by thinking <math>8(100 - 5) = 8 \times 100 - 8 \times 5</math>. Which number property is she using?</p> <p>(1) associative (3) commutative  (2) distributive (4) closure</p>	<p>10. Simplify: <math>\frac{-20}{3} + \frac{1}{2}</math></p>	<p>9. _____  10. _____</p>

<p>Which equation illustrates the associative property of multiplication?</p> <p>11. (1) <math>b(c + d) = bc + bd</math>  (2) <math>b + c = c + b</math>  (3) <math>b + (c + d) = (b + c) + d</math>  (4) <math>b(cd) = (bc)d</math></p>	<p>What is the additive inverse of <math>\frac{2}{3}</math>?</p> <p>16. (1) <math>-\frac{2}{3}</math>                      (3) <math>-\frac{3}{2}</math>  (2) <math>\frac{1}{3}</math>                                (4) <math>\frac{3}{2}</math></p>	<p>11. _____  12. _____</p>
<p>12. Simplify: <math>\frac{a}{4} \cdot \frac{1}{3b}</math></p>	<p>Which equation is an illustration of the associative property?</p> <p>17. (1) <math>6t + 9u = 9u + 6t</math>  (2) <math>9 + (d^2 + 2d + 1) = (d^2 + 2d + 1) + 9</math>  (3) <math>x(d^2 + 2d + 1) = xd^2 + 2dx + x</math>  (4) <math>45 + (x + x) = (45 + x) + x</math></p>	<p>13. _____  14. _____</p>
<p>What is the reciprocal of <math>x + 1</math>?</p> <p>13. (1) <math>x - 1</math>                      (3) <math>\frac{1}{x+1}</math>  (2) <math>-\frac{1}{x+1}</math>                      (4) <math>-x + 1</math></p>	<p>Which equation is an illustration of the commutative property?</p> <p>18. (1) <math>5(6 + 7) = 5 \cdot 6 + 5 \cdot 7</math>  (2) <math>5 \cdot (6 \cdot 7) = (5 \cdot 6) \cdot 7</math>  (3) <math>(5 + 1) \cdot 6 = 6 \cdot (5 + 1)</math>  (4) <math>(1 + 5) + 6 = 1 + (5 + 6)</math></p>	<p>15. _____  16. _____</p>
<p>14. Solve: <math>\frac{2x}{5} = \frac{-10}{3}</math></p>	<p>Which equation illustrates the multiplicative identity element?</p> <p>(1) <math>3x - 3x = 0</math>  19. (2) <math>56 \cdot \left(\frac{1}{56}\right) = 1</math>  (3) <math>4(x - 1) = 4x - 4</math>  (4) <math>7y^3 \cdot 1 = 7y^3</math></p>	<p>17. _____  18. _____</p>
<p>15. Simplify: <math>(4 - 9)^2 - 10 \div 5</math></p>	<p>Which equation illustrates the additive identity element?</p> <p>(1) <math>9y + 0 = 1</math>  20. (2) <math>9y + 0 = 9y</math>  (3) <math>-9y + 9y = 0</math>  (4) <math>9y(0) = 0</math></p>	<p>19. _____  20. _____</p>