



## 6th Grade Pre-Test

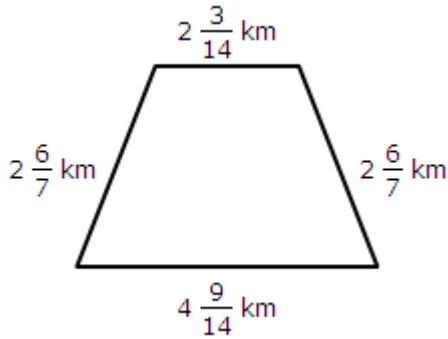
<p>1. Add. Simplify your answer.</p> $\frac{4}{9} + \frac{4}{9} = \boxed{\phantom{00}}$	<p>2. Write <math>\frac{5}{9}</math> in lowest terms:</p> $\frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$
<p>3. Which set of fractions are in order from least to greatest?</p> <p><input type="radio"/> <math>\frac{2}{4} &lt; \frac{1}{8} &lt; \frac{3}{12}</math></p> <p><input type="radio"/> <math>\frac{2}{4} &lt; \frac{3}{12} &lt; \frac{1}{8}</math></p> <p><input type="radio"/> <math>\frac{1}{8} &lt; \frac{3}{12} &lt; \frac{2}{4}</math></p> <p><input type="radio"/> <math>\frac{3}{12} &lt; \frac{2}{4} &lt; \frac{1}{8}</math></p>	<p>4. Which fractions are equivalent to <math>\frac{8}{12}</math>?</p> <p><i>Hint: There may be more than one.</i></p> <p><input type="checkbox"/> <math>\frac{2}{3}</math></p> <p><input type="checkbox"/> <math>\frac{7}{9}</math></p> <p><input type="checkbox"/> <math>\frac{1}{2}</math></p> <p><input type="checkbox"/> <math>\frac{4}{6}</math></p>
<p>5. A factory makes sheets of metal that are <math>\frac{2}{3}</math> inches thick. If a worker at the factory makes a stack of 6 of the sheets, how many inches thick will the stack be?</p> <p>Simplify your answer and write it as a proper fraction or as a whole or mixed number.</p>	
<p>6. What is the missing number that makes these fractions equal?</p> $\frac{3}{6} = \frac{\boxed{\phantom{00}}}{12}$	<p>7. What is the missing number that makes these fractions equal?</p> $\frac{5}{\boxed{\phantom{00}}} = \frac{10}{16}$
<p>8. What is the least common denominator of <math>\frac{3}{4}</math> and <math>\frac{5}{9}</math>?</p>	<p>9. What is the least common denominator of <math>\frac{5}{6}</math> and <math>\frac{1}{2}</math>?</p>

<p>10. What is the least common multiple of <b>5, 3, 10,</b> and <b>4</b>?</p>	<p>11. What is the greatest common factor of <b>36, 60, 72</b> ?</p>
<p>12. Add.</p> $\frac{7}{12} + \frac{2}{3} + \frac{11}{12} =$ <p>Simplify your answer and write it as a proper fraction or as a whole or mixed number.</p>	<p>13.</p> <p>What time will it be in 35 minutes?</p> <p>Write your answer using a colon. (Example 10:35)</p> 
<p>14. What fraction does the number line show?</p>  <p>Use a slash ( / ) to separate the numerator and denominator.</p>	
<p>15. What is the next fraction in the sequence? Simplify your answer.</p> $\frac{12}{13}, \frac{10}{13}, \frac{8}{13}, \frac{6}{13}, \dots$	<p>16. Write <math>9\frac{7}{24}</math> as an improper fraction.</p>
<p>17. What numbers are missing from this sequence?</p> <p>15, 23, 31, _____, 47, _____, 63</p>	<p>18. What is the next fraction in the sequence? Simplify your answer.</p> $\frac{2}{3}, \frac{1}{3}, \frac{1}{6}, \frac{1}{12}, \dots$
<p>19. Each day, the bear at the zoo eats <math>\frac{1}{3}</math> of a bucket of trout and <math>\frac{2}{3}</math> of a bucket of salmon. How many buckets of fish does the bear eat daily?</p> <p><i>Simplify your answer and write it as a proper fraction or as a whole or mixed number.</i></p>	

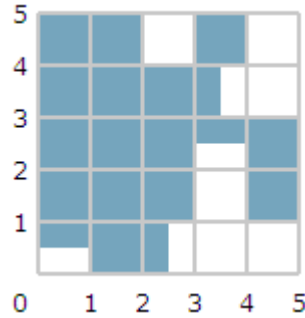
<p>20. Which sign makes this sentence true?</p> $\frac{8}{9} - \frac{3}{11} \text{ ? } \frac{6}{9} - \frac{1}{11}$ <p> <input type="radio"/> &gt;  <input type="radio"/> &lt;  <input type="radio"/> = </p>	<p>21. Which sign makes this sentence true?</p> $\frac{6}{12} \text{ ? } \frac{1}{2}$ <p> <input type="radio"/> &gt;  <input type="radio"/> &lt;  <input type="radio"/> = </p>
<p>22. Add. Simplify your answer and write it as a proper fraction or as a whole or mixed number.</p> $\frac{1}{3} + \frac{1}{6} + \frac{1}{2} + \frac{1}{2} =$	<p>23. If 22 ice cream cones cost a teacher \$19.58 and the ice cream cones all cost the same amount, what is the price of each ice cream cone?</p>
<p>24. Joe put 1 empty can in the first bin, 3 empty cans in the second bin, 9 empty cans in the third bin, and 27 empty cans in the fourth bin. If this pattern continues, how many empty cans will Joe put in the seventh bin?</p>	
<p>25. Multiply. Simplify your answer and write it as a proper fraction or as a whole or mixed number.</p> $5 \times \frac{3}{5} \times 1 \frac{2}{3} \times \frac{2}{3} \times 4 =$	<p>26. Divide. Simplify your answer and write it as a proper fraction or as a whole or mixed number.</p> $5 \frac{7}{16} \div 1 \frac{1}{4} =$
<p>27. At the zoo's new insect exhibit, Joe watched an ant crawl for <math>\frac{1}{3}</math> of a minute, stay still for a while, and then crawl for <math>\frac{2}{5}</math> of a minute more. In all, how much time did the ant spend moving? <i>Simplify your answer and write it as a proper fraction or as a whole or mixed number.</i></p>	

28. Find the perimeter.

*Simplify your answer and write it as a proper fraction or as a whole or mixed number.*



29. What is the perimeter of the shaded area?

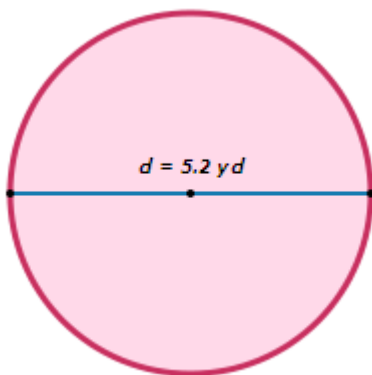


30. While making a dessert, Jane used  $\frac{9}{10}$  of a scoop of brown sugar as well as  $\frac{1}{2}$  of a scoop of white sugar. How much more brown sugar did Jane use?

31. Which is **less**?
- 44% of 3,000
  - 192% of 500

32. The diameter of this circle is 5.2 yards. What is the circle's area?

Use 3.14 for  $\pi$  and round your answer to the nearest hundredth.



33. What is the area of this figure?

