

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
<b>MARCH 2016</b>		<b>1</b> $\angle A$ and $\angle B$ form a linear pair. Find the value of $x$ if $m\angle A = 13x - 8$ and $m\angle B = 5(24x + 11)$	<b>2</b> Find the $y$ -intercept of the line parallel to the line represented by $y = 3x - 4$ and through the point $(-2, -4)$ .	<b>3</b> Use <b>Figure #3</b> on the back.  Solve for $x$ .	<b>4</b> The angles of a triangle are in a ratio of $1 : 15 : 29$ . What is the measure of the smallest angle of the triangle?	<b>5</b> $\triangle TEW \sim \triangle QMA$ with similarity ratio $3 : 4$ . Find $QM$ if $TE = 3.75$ .
<b>6</b> Use <b>Figure #6</b> on the back.  Solve for $x$ .	<b>7</b> Use <b>Figure #7</b> on the back.  Find $GF$ .	<b>8</b> The hypotenuse of a right triangle is 17 m and one of the legs is 15 m. What is the length of the other leg?	<b>9</b> $V$ is in the interior of $\angle LMN$ . $m\angle NML = 18x + 13$ $m\angle VML = 130^\circ$ , $m\angle NMV = 5x$ . Solve for $x$ .	<b>10</b> $B$ is the midpoint of $\overline{AC}$ . Find the coordinates of $A$ if $B$ has coordinates $(18, 20)$ and $C$ has coordinates $(26, 30)$ .	<b>11</b> Find the $y$ -intercept of the line through $(-5, -4)$ and perpendicular to the line represented by $y = -\frac{1}{3}x + 3$ .	<b>12</b> Use <b>Figure #12</b> on the back.  Find the area of the triangle.
<b>13</b> Find the distance between $(1, -11)$ and $(13, -6)$ .	<b>14</b> Use <b>Figure #14</b> on the back.  Solve for $x$ .	<b>15</b> Find the range of possible values for the third side of a triangle if two of the sides measure 2 ft. and 3 ft.	<b>16</b> Find the area of a right triangle with a hypotenuse of length $\sqrt{80}$ and a leg of length 4.	<b>17</b> Use <b>Figure #17</b> on the back.  Solve for $x$ .	<b>18</b> Jensen has a map with the scale 2 in : 35 mi. Rock City and Laketown are 315 miles apart. How far apart are they on the map?	<b>19</b> How many sides does a polygon have if its interior angle sum is $3060^\circ$ ?
<b>20</b> Use <b>Figure #20</b> on the back.  Solve for $x$ .	<b>21</b> $B$ is between $A$ and $C$ on $\overline{AC}$ . Find the coordinates of $A$ such that $AB : BC = 2 : 1$ given $B(6, 5)$ and $C(8, 7)$ .	<b>22</b> Two complementary angles are in a ratio of $11 : 34$ . What is the measure of the smaller angle?	<b>23</b> How many sides does a regular polygon have if each interior angle of the polygon measures $\sim 164.35^\circ$ ?	<b>24</b> Find the $y$ -intercept of the line $\perp$ to $\overline{AB}$ & through its midpoint. $A$ has coordinates $(2, 3)$ & $B$ has coordinates $(11, 6)$ .	<b>25</b> Use <b>Figure #25</b> on the back.  Find $TU$ .	<b>26</b> Find the length of $\overline{AB}$ where $A$ has coordinates $(-16, 4)$ and $B$ has coordinates $(9, 11)$ .
<b>27</b> Use <b>Figure #27</b> on the back.  Solve for $x$ .	<b>28</b> Find the midpoint of $\overline{TW}$ where $T$ has coordinates $(-6, 14)$ and $W$ has coordinates $(10, 2)$ .	<b>29</b> Use <b>Figure #29</b> on the back.  Solve for $x$ .	<b>30</b> $R$ is between $Q$ and $S$ and all three points are collinear. Find $RS$ if $QR = 2x + 33$ , $RS = x + 37$ , and $QS = 49$ .	<b>31</b> $\triangle CTV \sim \triangle XYZ$ with similarity ratio $5 : 2$ . Find the value of $x$ if $CV = -6x + 106$ and $XZ = -2x + 30$ .	<h1 style="margin: 0;">GEOMETRY</h1> <ul style="list-style-type: none"> <li>• <b>Do not</b> leave any question blank. If you don't know how to solve it... <b>ask for help!</b></li> <li>• <b>Show all your work!</b> The process is more important than the answer.</li> </ul>	

Figure #3

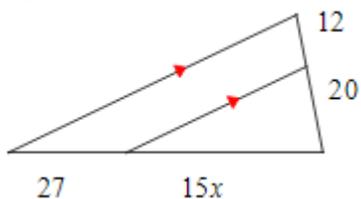


Figure #6

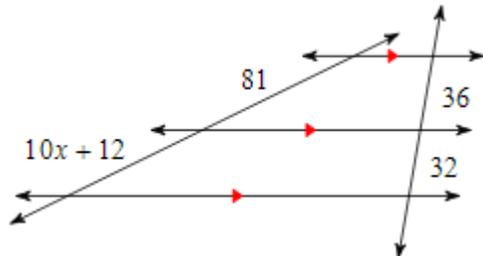


Figure #7

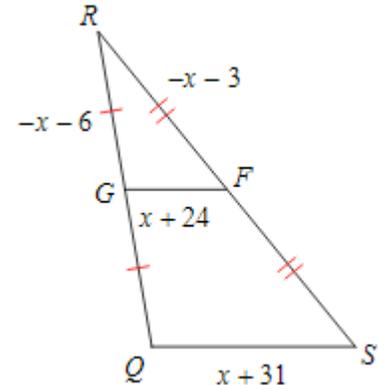


Figure #12

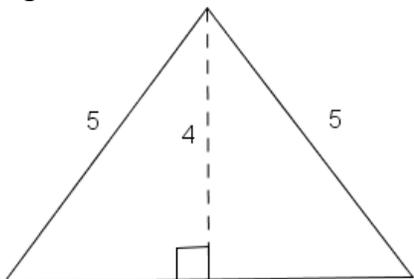


Figure #14

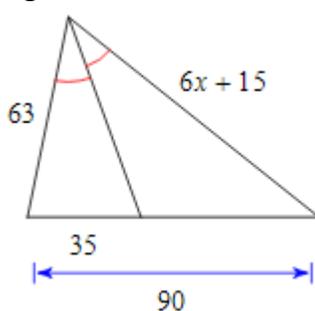


Figure #17

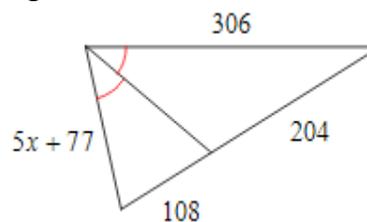


Figure #20

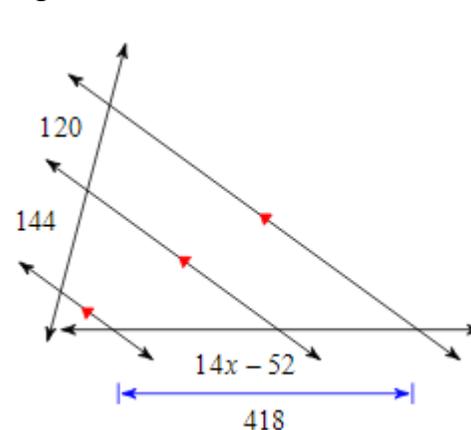


Figure #25

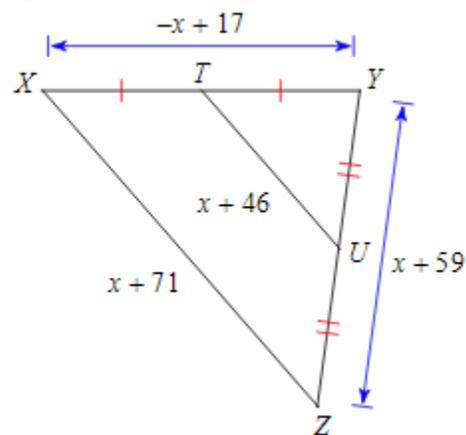


Figure #27

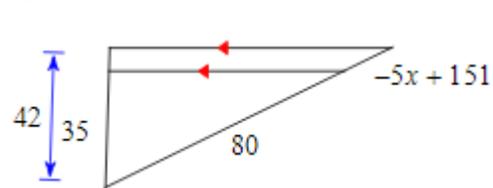


Figure #29

The two polygons are similar.

