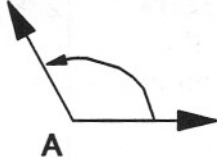
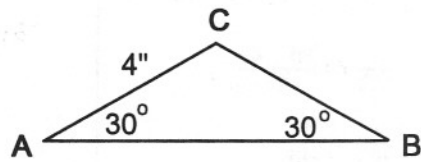
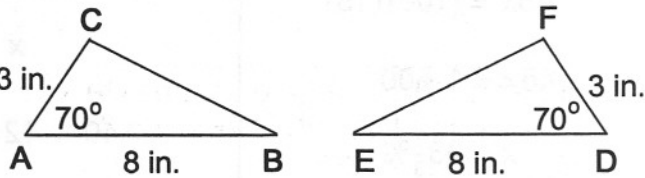


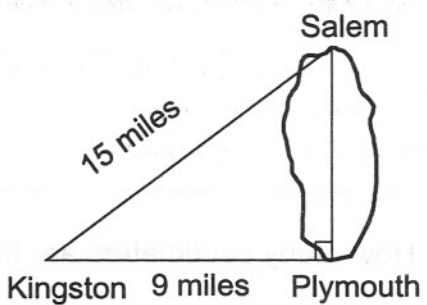
<p>26A) Evaluate <math>3x - y^2</math> when <math>x = 4</math> and <math>y = 3</math>.</p> $3 \times 4 - 3^2$ $3 \times 4 - 9$ $12 - 9$ $3$	<p>26B) Jane, who is 9 years old, is one-third the age of her mother. How old is Jane's mother?</p> $9 = \frac{1}{3}(x)$ $3(9) = \frac{1}{3}(x)(3)$ $x = 27 \text{ years}$	<p>27A) Solve for <math>x</math>.</p> $x + 12 = 15$ $x + 12 - 12 = 15 - 12$ $x = 3$
---	--	---

<p>27B) Solve for <math>x</math>.</p> $8x - 18 = 3(2x - 3)$ $8x - 18 = 6x - 9$ $8x - 18 + 18 = 6x - 9 + 18$ $8x = 6x + 9$ $8x - 6x = 6x - 6x + 9$ $2x = 9$ $2x/2 = 9/2$ $x = 4.5$	<p>28) Angle A is <u>  A  </u>.</p> <p>A) obtuse B) acute C) right D) straight</p> 
---	--

<p>29A) Angle ACB of triangle ABC has <u>  120  </u> degrees.</p> <p>29B) Side BC of triangle ABC is <u>  4"  </u> long.</p>	
--	---

<p>30) Are triangles ABC and DEF congruent? Why?</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;"> <p>Yes. Triangles with 2 sides and their included angle equal are congruent (SAS).</p> </div>	
---	--

<p>31) A family drove for 7 hours at 55 miles per hour. How far did they travel?</p> $D = rt$ $= 55 \frac{\text{miles}}{\text{hour}} (7 \text{ hours})$ $= 385 \text{ miles}$	<p>32) Our family in question 31 wants to travel 455 miles in 7 hours. How fast must they travel?</p> $D = rt$ $455 \text{ miles} = r(7 \text{ hours})$ $\frac{455 \text{ miles}}{7 \text{ hours}} = r$ $r = 65 \text{ MPH}$	<p>33) Find the circumference of a circular deck with a radius of 8 feet.</p> $C = 2\pi r$ $= 2(3.14)(8)$ $= 50.24 \text{ feet}$
---	--	--

<p>34) A parallelogram has a base of 12" and a height of 11". Find its area.</p> $A = bh$ $= 12(11)$ $= 132 \text{ square inches}$	<p>35) Find the volume of a 10" by 15" by 12" aquarium.</p> $V = lwh$ $= 10(15)(12)$ $= 1,800 \text{ cubic inches}$	<p>36) How long would it take \$300 to earn interest of \$42 with a simple interest rate of 4%?</p> $I = prt$ $42 = (\$300)(.04)t$ $42 = 12t$ $t = 3.5 \text{ years}$
<p>37) The hypotenuse of a right triangle is 15' and a leg is 9'. Find the length of the other leg.</p> $H^2 = a^2 + b^2$ $15^2 = 9^2 + b^2$ $225 = 81 + b^2$ $144 = b^2$ $b = 12 \text{ feet}$	<p>38) Bob earns \$5 per hour for a 35-hour week during his 14-week summer vacation. Find his summer wages.</p> <p>weekly earnings</p> $\$5 \times 35 \text{ hours} = \$175$ <p>summer earnings</p> $\$175 \times 14 \text{ weeks} = \$2,450$	<p>39) Carlos bought 3 sodas for 65¢ each, 2 hot dogs for \$1.25 each, and a hamburger for \$1.75. He paid with \$10. Find his change.</p> <p>soda = 3(\$.65) = \$1.95  hot dogs = 2(\$1.25) = \$2.50  hamburger = \$1.75</p> <p>spending = \$1.95 + \$2.50 + \$1.75  = \$6.20</p> <p>change = \$10.00 - \$6.20 = \$3.80</p>
<p>40) How much would <math>2\frac{3}{4}</math> pounds of chicken cost at \$1.88 per pound?</p> $\left(\frac{\$1.88}{\text{pounds}}\right)(2\frac{3}{4} \text{ pounds})$ $= (1.88)\left(\frac{11}{4}\right)$ $= \frac{20.68}{4}$ $= \$5.17$	<p>41) Bill earned \$210 for 30 hours work. Find his pay rate and earnings for a 40-hour week.</p> <p>pay rate = <math>\frac{\text{dollars earned}}{\text{hours worked}}</math></p> $= \frac{\$210}{30} = \$7.00$ <p>earnings = rate x hours</p> $= (\$7)(40) = \$280$	<p>42) How much will Maria have left after paying an 18% tax on her \$25,000 salary?</p> <p>tax <math>\frac{18}{100} = \frac{x}{\\$25,000}</math></p> $(18)(25,000) = (100)(x)$ $x = \$4,500$ <p>balance</p> $\$25,000 - \$4,500 = \$20,500$
<p>43) Salem and Plymouth are at opposite sides of Blue Lake. Kingston is 15 miles from Salem and 9 miles from Plymouth. How long does a boat traveling at 2.5 miles per hour take to get from Salem to Plymouth?</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>Distance <math>H^2 = a^2 + b^2</math></p> <math display="block">15^2 = 9^2 + b^2</math> <math display="block">225 = 81 + b^2</math> <math display="block">225 - 81 = 81 + b^2 - 81</math> <math display="block">144 = b^2</math> <math display="block">b = 12 \text{ miles}</math> </div> <div style="width: 45%;"> <p>Time <math>D = rt</math></p> <math display="block">12 = 2.5t</math> <math display="block">12/2.5 = (2.5t)/2.5</math> <math display="block">t = 4.8 \text{ hours}</math> </div> </div> <div style="text-align: right; margin-top: 20px;">  </div>		