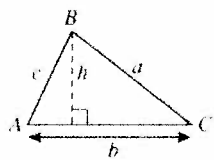
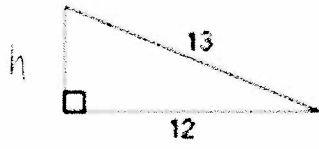
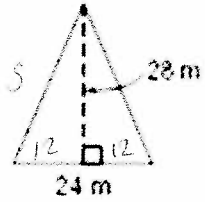
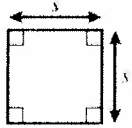
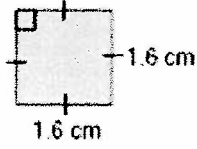
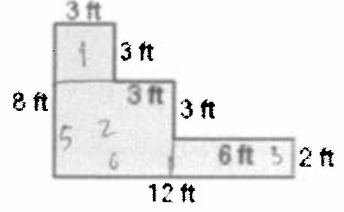
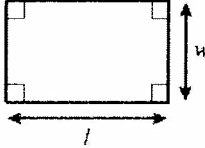
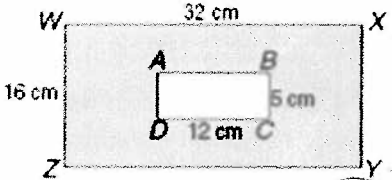
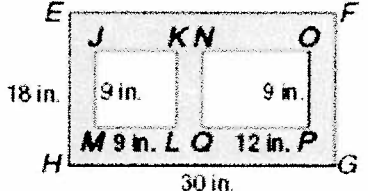
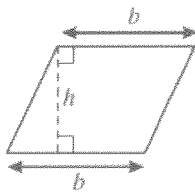


Perimeter & Area of 2-Dimensional Figures

<p>TRIANGLE FORMULA</p>  $A = \frac{1}{2}bh$ $A = \frac{1}{2}ab \sin C$	<p>Example 1:</p>  <p>PT: $h^2 + 12^2 = 13^2$ $h^2 + 144 = 169$ $h^2 = 25$ $h = 5$</p> <p>$A = \frac{1}{2}(12)(5) = 30$ $P = 5 + 12 + 13 = 30$</p>	<p>Example 2:</p>  <p>PT: $12^2 + 28^2 = 5^2$ $928 = 5^2$ $\sqrt{928} = 5$</p> <p>$A = \frac{1}{2}(24)(28) = 336$ $P = \sqrt{928} + \sqrt{928} + 24 = 84.9$</p>
<p>SQUARE FORMULA</p>  $p = 4s$ $A = s^2$	<p>Example 1:</p>  <p>$A = (1.6)^2 = 2.56$ $P = 4(1.6) = 6.4$</p>	<p>Example 2:</p>  <p>$P = 8 + 3 + 3 + 3 + 3 + 6 + 2 + 12 = 40$ $A = 1 + 2 + 3$ $(3 \cdot 3) + (5 \cdot 6) + (6 \cdot 2)$ $9 + 30 + 12 = 51$</p>
<p>RECTANGLE FORMULA</p>  $p = 2l + 2w$ $A = lw$	<p>Example 1:</p>  <p>$P_1 = 2(16) + 2(32) = 96$ $P_2 = 2(12) + 2(5) = 22$ $A = (16 \cdot 32) - (12 \cdot 5)$ $512 - 60 = 452$</p>	<p>Example 2:</p>  <p>$P_{EFGH} = 2(18) + 2(30) = 96$ $P_{JKLM} = 2(9) + 2(9) = 36$ $P_{NOPQ} = 2(9) + 2(12) = 42$ $A = (18 \cdot 30) - (9 \cdot 9) - (9 \cdot 12)$ $540 - 81 - 108 = 351$</p>

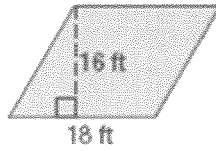
351 in²

PARALLELOGRAM FORMULA



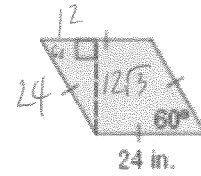
$$A = bh$$

Example 1:



$$A = 18(16) = 288 \text{ ft}^2$$

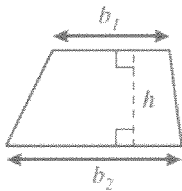
Example 2:



$$A = 24(12\sqrt{3})$$

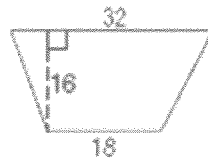
$$498.8 \text{ in}^2$$

TRAPEZOID FORMULA



$$A = \frac{1}{2}h(b_1 + b_2)$$

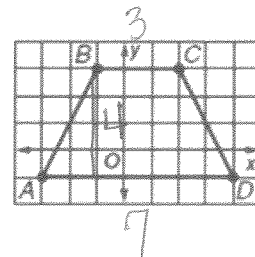
Example 1:



$$A = \frac{1}{2}(16)(18+32)$$

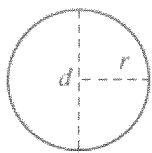
$$400$$

Example 2:



$$\frac{1}{2}(4)(3+7) = 20$$

CIRCLE FORMULA

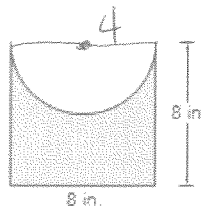


$$C = 2\pi r$$

$$C = \pi d$$

$$A = \pi r^2$$

Example 1:



$$A = (8 \cdot 8) - \frac{1}{2}(16\pi)$$

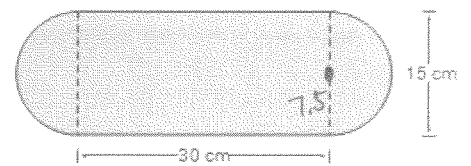
$$64 - 8\pi = 38.9 \text{ in}^2$$

$$P/C = (8 \cdot 3) + \frac{180}{360} \cdot 8\pi$$

$$24 + 4\pi$$

$$36.6 \text{ in}$$

Example 2:



$$A = (30 \cdot 15) + 7.5^2 \pi$$

$$450 + 56.25\pi$$

$$626.7 \text{ cm}^2$$

$$P/C = 30(2) + 15\pi$$

$$60 + 15\pi = 107.1 \text{ cm}^2$$