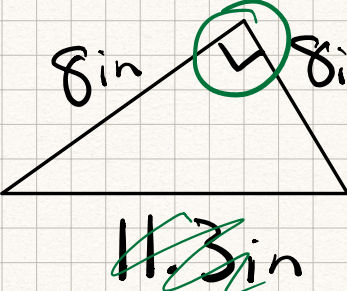
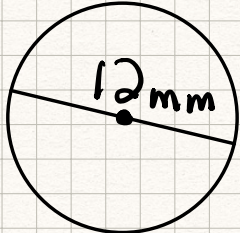


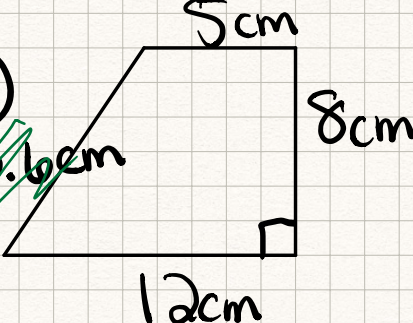
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More forms of pi

Warm Up Find the perimeter and area. Use 3.14 for pi.

①  $P = 8 + 8 + 11.3$
 $P = 27.3 \text{ in}$
 $A = \frac{1}{2}bh$
 $A = \frac{1}{2}(8)(8)$
 $A = 32 \text{ in}^2$

②  $C = \pi d$
 $C = 3.14(12)$
 $C = 37.68 \text{ mm}$
 $A = \pi r^2$
 $A = 3.14(6)^2$
 $A = 113.04 \text{ mm}^2$

③  $P = 5 + 8 + 12 + 10.6$
 $P = 35.6 \text{ cm}$
 $A = \frac{1}{2}h(b_1 + b_2)$
 $A = \frac{1}{2}(8)(5 + 12)$
 $A = 68 \text{ cm}^2$

Other approximations of pi

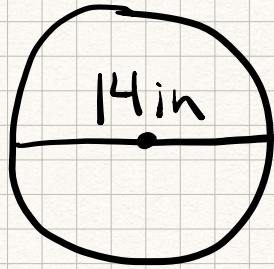
π	
3	<ul style="list-style-type: none">• use when estimating• use when you don't need accuracy
3.14	most common most used in school easy to use with calculator
$\frac{22}{7}$	Use when diameter or radius are multiples of 7.
Calculator pi 3.141592654	<ul style="list-style-type: none">• use when you need lots of accuracy or precision
Exact π	Use in equations - when you need to calculate with it.

$$A = 12\pi$$

$$A = 3\pi$$

$$\frac{12\pi}{3\pi} = 4 \text{ times bigger}$$

$\frac{22}{7}$ as
Approximation



$$C = \pi d$$

$$C = \frac{22}{7} \cdot \frac{14}{1}$$

44 in

