

4-20-17

Aim: SWBAT find the circumference and area of a circle.

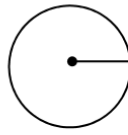
Do Now: Correct hw

HW: Finish WS

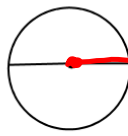
Circumference of a Circle

Find the circumference of the circle using $C = 2\pi r$. Write your answer four different ways.

EXACT

<p>1. A circle with radius 5 cm.</p> 	<p>Answer in terms of π.</p> <p>$C = 2\pi r$ $C = 2 \cdot \pi \cdot 5$ $C = 10\pi \text{ cm}$</p>	<p>Answer using the π button.</p> <p>$C = 2\pi r$ $C = 2 \cdot \pi \cdot 5$ $C = 10\pi$ $C = 31.41592654 \dots$</p>	<p>Answer rounded to the nearest tenth.</p> <p>$C = 2\pi r$ $C = 2 \cdot \pi \cdot 5$ $C = 10\pi$ $C = 31.41592654 \dots$ $C \approx 31.4 \text{ cm}$</p>	<p>Answer using $\pi \approx 3.14$.</p> <p>$C = 2\pi r$ $C \approx (2)(3.14)(5)$ $C \approx 31.4 \text{ cm}$</p>
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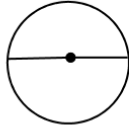
EXACT

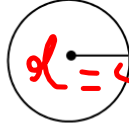
<p>2. A circle with diameter 20 inches.</p>  <p>$r = 10 \text{ in.}$</p>	<p>Answer in terms of π.</p> <p>$C = 2\pi r$ $C = 2 \cdot \pi \cdot 10$ $C = 20\pi \text{ in.}$</p>	<p>Answer using the π button.</p> <p>$C = 2\pi r$ $C = 2 \cdot \pi \cdot 10$ $C = 20\pi \text{ in.}$ $C = 62.83185307 \dots \text{ in.}$</p>	<p>Answer rounded to the nearest tenth.</p> <p>$C = 2\pi r$ $C = 2 \cdot \pi \cdot 10$ $C = 20\pi \text{ in.}$ $C = 62.83185307 \dots \text{ in.}$</p>	<p>Answer using $\pi \approx 3.14$.</p> <p>$C = 2\pi r$ $C \approx (2)(3.14)(10)$ $C \approx 62.8 \text{ in.}$</p>
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$C \approx 62.8 \text{ in.}$

Circumference of a Circle

Find the circumference of the circle using $C = \pi d$. Write your answer four different ways.

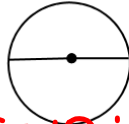
<p>3. A circle with diameter 7 inches.</p> 	<p>Answer in terms of π.</p> $C = \pi d$ $C = \pi \cdot 7$ $C = 7\pi \text{ in.}$	<p>Answer using the π button.</p> $C = \pi d$ $C = \pi \cdot 7$ $C = 7\pi \text{ in.}$ $C = 21.99114858\dots \text{in.}$	<p>Answer rounded to the nearest tenth.</p> $C = \pi d$ $C = \pi \cdot 7$ $C = 7\pi \text{ in.}$ $C = 21.99114858\dots \text{in.}$ $C \approx 22.0$	<p>Answer using $\pi \approx 3.14$.</p> $C = \pi d$ $C \approx (3.14)(7)$ $C \approx 21.98 \text{ in.}$
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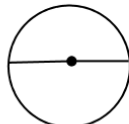
<p>4. A circle with radius 20 meters.</p> 	<p>Answer in terms of π.</p> $C = \pi d$ $C = \pi \cdot 40$ $C = 40\pi \text{ m}$	<p>Answer using the π button.</p> $C = \pi d$ $C = \pi \cdot 40$ $C = 40\pi \text{ m}$ $C = 125.6637061\dots \text{m}$	<p>Answer rounded to the nearest tenth.</p> $C = \pi d$ $C = \pi \cdot 40$ $C = 40\pi \text{ m}$ $C = 125.6637061\dots \text{m}$ $C \approx 125.7 \text{ m}$	<p>Answer using $\pi = 3.14$.</p> $C = \pi d$ $C \approx (3.14)(40)$ $C \approx 125.6 \text{ m}$
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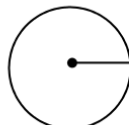
Finding the Area, the Radius, or the Diameter

Find the area of each circle using $A = \pi r^2$. Write your answer four different ways.

$A = \pi \cdot r \cdot r$

<p>1. A circle with diameter 20 inches.</p>  <p>$r = 10 \text{ in.}$</p>	<p>Answer in terms of π.</p> <p>$A = \pi r^2$ $A = \pi \cdot 10^2$ $A = \pi \cdot 100$ $A = 100\pi \text{ in.}^2$</p>	<p>Answer using the π button.</p> <p>$A = \pi r^2$ $A = \pi \cdot 10^2$ $A = \pi \cdot 100$ $A = 100\pi \text{ in.}^2$ $A = 314.1592654\dots \text{in.}^2$</p>	<p>Answer rounded to the nearest tenth.</p> <p>$A = \pi r^2$ $A = \pi \cdot 10^2$ $A = \pi \cdot 100$ $A = 100\pi \text{ in.}^2$ $A = 314.1592654\dots \text{in.}^2$ $A \approx 314.2 \text{ in.}^2$</p>	<p>Answer using $\pi \approx 3.14$.</p> <p>$A = \pi r^2$ $A \approx (3.14) \cdot 10^2$ $A \approx 314 \text{ in.}^2$</p>
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<p>2. A circle with diameter 7 inches.</p> 	<p>Answer in terms of π.</p>	<p>Answer using the π button.</p>	<p>Answer rounded to the nearest tenth.</p>	<p>Answer using $\pi \approx 3.14$.</p>
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<p>3. A circle with radius 20 meters.</p> 	<p>Answer in terms of π.</p>	<p>Answer using the π button.</p>	<p>Answer rounded to the nearest tenth.</p>	<p>Answer using $\pi \approx 3.14$.</p>
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