



Math Virtual Learning

Pre-Algebra

Area of Circles

May 5, 2020



Grade 7/Area of Circles
Lesson: May 5, 2020

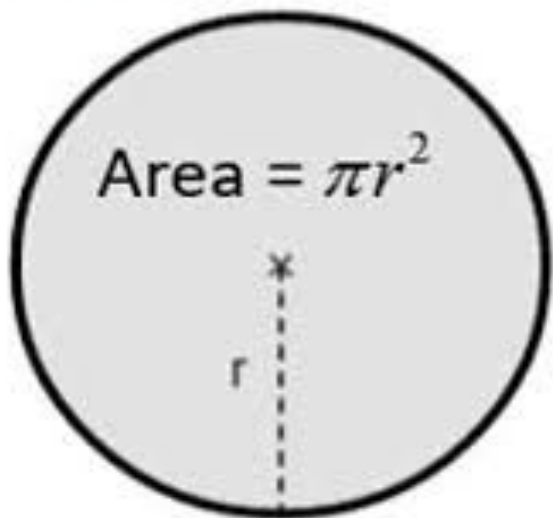
Objective/Learning Target:
Find the area of a circle.

Let's Get Started:
Watch Video: [Area of a Circle](#)

Quick Video Review:

Below are the most important concepts from the video you just watched.

Area of Circle



$\pi =$

3.14

Practice:

Find the value of these numbers, raised to the 2nd power.

Area of Circles

Warm Up Simplify.

1. 8^2

2. 12^2

3. 6.2^2

4. 7.5^2

Practice:

Find the value of these numbers, raised to the 2nd power.

Area of Circles

Warm Up Simplify.

1. 8^2 64

$$8 \times 8 = 64$$

2. 12^2 144

$$12 \times 12 = 144$$

3. 6.2^2 38.44

$$6.2 \times 6.2 = 38.44$$

4. 7.5^2 56.25

$$7.5 \times 7.5 = 56.25$$

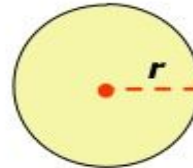
Just another reminder that...

Area of Circles

AREA OF A CIRCLE

The area A of a circle is the product of π and the square of the circle's radius r .

$$A = \pi r^2$$



Practice:

Go to this website:

[Khan Academy Area of a Circle](#)

1. Look at the question carefully.
2. Use the “Show Calculator” button for calculator assistance.
3. Use 3.14 as your value for Pi.
4. If you get stuck, click on the blue “watch a video or use a hint” link.
5. Answer all 7 questions.

Practice:

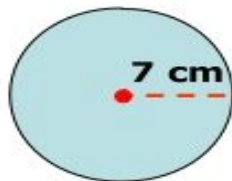
Answer the question on a piece of paper.

Use 3.14 for Pi (π).

Area of Circles

Find the area of the circle to the nearest tenth.

Use 3.14 for π .



Practice:

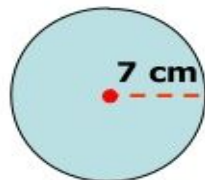
Answer the question on a piece of paper.

Use 3.14 for Pi (π).

Area of Circles

Find the area of the circle to the nearest tenth.

Use 3.14 for π .



$$A = \pi r^2$$

Use the formula.

$$A \approx 3.14 \cdot 7^2$$

Substitute 7 for r .

$$A \approx 3.14 \cdot 49$$

Evaluate the power.

$$A \approx 153.86$$

Multiply.

The area of the circle is about 153.9 cm^2 .

Remember!

The order of operations calls for evaluating the exponents before multiplying.

Practice:

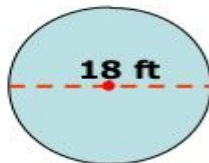
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Area of Circles

Find the area of the circle to the nearest tenth.

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Practice:

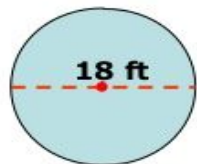
Answer the question on a piece of paper.

Use 3.14 for Pi (π).

Area of Circles

Find the area of the circle to the nearest tenth.

Use 3.14 for π .



$$A = \pi r^2$$

Use the formula.

$$A \approx 3.14 \cdot 9^2$$

Substitute 9 for r .

$$A \approx 3.14 \cdot 81$$

Evaluate the power.

$$A \approx 254.34$$

Multiply.

The area of the circle is about 254.3 ft².

Practice:

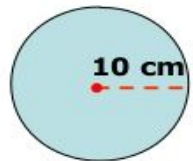
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Use 3.14 for Pi (π).

Area of Circles

Find the area of the circle to the nearest tenth.

Use 3.14 for π .



Practice:

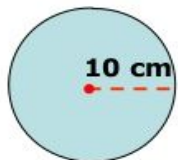
Answer the question on a piece of paper.

Use 3.14 for Pi (π).

Area of Circles

Find the area of the circle to the nearest tenth.

Use 3.14 for π .



$$A = \pi r^2$$

Use the formula.

$$A \approx 3.14 \cdot 10^2$$

Substitute 10 for r .

$$A \approx 3.14 \cdot 100$$

Evaluate the power.

$$A \approx 314$$

Multiply.

The area of the circle is about 314 cm².

Practice:

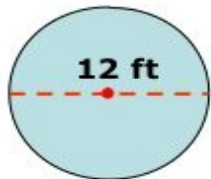
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Use 3.14 for Pi (π).

Area of Circles

Find the area of the circle to the nearest tenth.

Use 3.14 for π .



Practice:

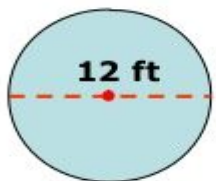
Answer the question on a piece of paper.

Use 3.14 for Pi (π).

Area of Circles

Find the area of the circle to the nearest tenth.

Use 3.14 for π .



$$A = \pi r^2$$

Use the formula.

$$A \approx 3.14 \cdot 6^2$$

Substitute 6 for r .

$$A \approx 3.14 \cdot 36$$

Evaluate the power.

$$A \approx 113.04$$

Multiply.

The area of the circle is about 113.0 ft^2 .

Additional Practice:

Click on the links below to get additional practice and to check your understanding!

[Quizizz](#) - Practice

[IXL](#) - Practice

[Pro Profs](#) - Practice

[Open Middle](#) - Challenge