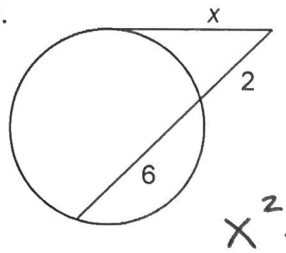
9.



$x^2 = 2(6+2)$

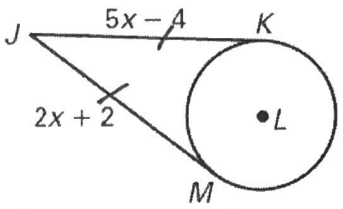
$x^2 = 2(8)$

$x^2 = 16$

$\boxed{x = 4}$

↓ Surprise tangent question 🙂

10.



$5x - 4 = 2x + 2$

$-2x \quad -2x$

$3x - 4 = 2$

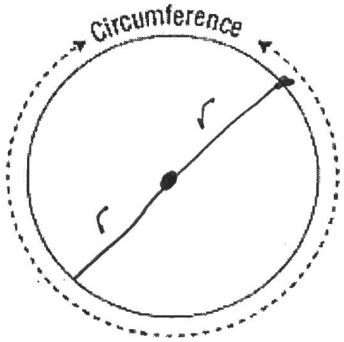
$+4 \quad +4$

$\frac{3x}{3} = \frac{6}{3}$

$\boxed{x = 2}$

Arc Length

In 7th grade, you learned how to calculate the circumference of a circle. You also learned that the circumference of a circle divided by the diameter is equal to pi. The circumference of a circle is the distance around the circle.



diameter = 2 radii

Circumference

$C = 2\pi r$ or $C = \pi d$

Practice reviewing how to calculate the circumference or radius/diameter of a circle below. Leave your answers in terms of pi. Find the circumference, radius, or diameter.

A. r = 6 ft

$d = 2(6) = 12$ ft.

$C = 2\pi(6) = 12\pi$ ft.

≈ 37.70 ft

B. d = 15 in

$r = \frac{15}{2} = 7.5$ in

$C = \pi(15)$

15π in

≈ 47.12 in

C. $C = 16\pi$ cm

$C = \pi d$

$d = 16$ cm

$r = \frac{16}{2} = 8$ cm

D. $C = 40\pi$ m

$d = 40$ m

$r = \frac{40}{2} = 20$ m