

2.0 Circle Warm-Up

Warm-Up 1: What do you know about a circle?

Warm-Up 2:

Sometimes I as your teacher have to ride my bike to school. If my bike tire has a radius 12 inches.

1. What is the diameter?

24 inches

2. How far would I travel if my bike tire rotates 1 time?

$$\text{Circumference} = 2\pi r = 2\pi \cdot 12 = 24\pi \approx 75.4m$$

3. How far would I travel if my bike tire rotates 762 times?

$$24\pi \cdot 762 = 18288\pi \text{ in} \approx 57,454.8 \text{ in}$$

4. If I wanted to travel from Timpanogos High School to Disneyland (651 miles) on my bike, how many rotations would it require?

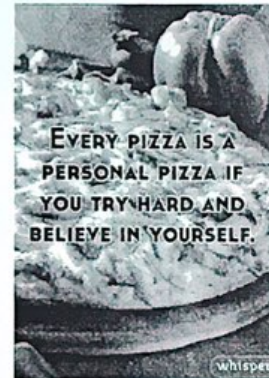
$$1 \text{ mile} = 63360 \text{ inches} \quad 651 \cdot 63360 = 41,247,360 \text{ inches}$$

$$\boxed{547,060.10 \text{ rotations}} \quad 24\pi$$

Warm-Up 3:

Pizza Time!!!

- 7-inch Personal Pizza (you don't have to split it)
- 12-inch Small (to split among 3 people)
- 16-inch Medium (to split among 5 people)
- 21-inch Large (to split among 7 people)
- 25-inch Extra-Large (to split among 10 people)



Which is the best pizza for me to order if I want the biggest piece of pizza possible?? Justify your answer with calculations!

