

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

### Indirect Measurement

1. A 50 foot apartment building cast a 12.5 foot shadow and a nearby building cast a 20 foot shadow. How tall is the building?
2. A 8 foot tall stop sign cast a 3 foot shadow. A nearby man is 6 feet tall. How long is the mans shadow?
3. There are two flag poles in the front of the school. You know that the taller flag pole is 40 feet tall. The longer flag poles shadow is 30 feet long and the shorter flag poles shadow is 20 feet long. How tall is the shorter flag pole?
4. A child that is 4 feet tall cast a 14 foot shadow. A nearby tree cast a shadow that is 112 feet long. How tall is the tree?
5. A fire hydrant 3 feet tall cast a shadow that is 5 feet long. A person has a shadow that is 10 feet long. How tall is this person?

6. A dog that is two feet tall has a one foot shadow. If its puppy is 6 inches tall, how long will the puppies shadow be?
  
7. One telephone pole has a shadow that is 25 feet long and the pole is 40 feet tall. A second telephone pole is 35 feet tall. How long will the shadow be?
  
8. At an amusement park there are two Ferris Wheels. The taller one is 126 feet tall and cast a 45 foot shadow. The smaller one cast a 15 foot shadow. How tall is the smaller Ferris Wheel?
  
9. A wheelchair ramp slopes upwards at a constant incline from a sidewalk to the door. If the ramp is two feet high when it is 8 feet from the sidewalk, how high is the ramp 12 feet from the sidewalk?
  
10. A 30 foot house cast a shadow that is 45 feet long. A nearby light pole has a 30 foot long shadow. How tall is the light pole?

## Indirect Measurement Answer Sheet

1. 80 ft.
2. 2.25 ft.
3. 26.67 ft.
4. 32 ft.
5. 6 ft.
6. .25 ft. *3 inches*
7. 21.875 ft.
8. 42 ft.
9. 3 ft.
10. 20 ft.