

SHADOWS

Content Standards:

- Apply ratios and proportions to geometric concepts.

Process Standards:

- Collaborate with partners/small groups.

Task:

You will be working with a partner on this task. We will be going outside and you are to find the length of your shadow. I will give you a measuring tape. Find the ratio of your actual height to the height of the shadow. You need to measure the shadows of at least four other objects outside. Using the ratio you have created, find the heights of the other four objects.

Criteria:

- Create the ratio of actual height to the height of the shadow
- Find the actual heights of four other objects

Solve the problem.

1a. Jenny casts a 6-foot shadow while, nearby, Bob casts a 9-foot shadow. If Bob is 6 feet tall, how tall is Jenny?

1b. Explain how you found your answer.

Your height, in inches: _____ Your shadow's height, in inches: _____

RATIO: _____

Object	Height of shadow	Height of actual object

Rubric

Criteria	Poor	Satisfactory	Great
Found ratio of actual height to the height of the shadow	Did not find the ratio of actual height to the shadow (0 pts)		Found the ratio of actual height to height of shadow (2 pts)
Found height of object #1	Did not try to find height of object (0 pts)	Tried to find height, but was inaccurate (1 pt)	Found height of actual object (2 pts)
Found height of object #2	Did not try to find height of object (0 pts)	Tried to find height, but was inaccurate (1 pt)	Found height of actual object (2 pts)
Found height of object #3	Did not try to find height of object (0 pts)	Tried to find height, but was inaccurate (1 pt)	Found height of actual object (2 pts)
Found height of object #4	Did not try to find height of object (0 pts)	Tried to find height, but was inaccurate (1 pt)	Found height of actual object (2 pts)

Multiply points by 2 for final score.

Total _____/20