

# Sixth Grade: Activity 18 Practice

(pg. 231-232)

## Lesson 18-1

1. a. 10 seconds

b. 300 photos

2. 30,000 frames

3. 70 seconds;

$$\frac{1,750 \text{ frames}}{\text{film}} \times \frac{1 \text{ sec}}{25 \text{ frames}} = \frac{1,750 \cancel{\text{ frames}} \text{ sec}}{25 \cancel{\text{ film}} \cancel{\text{ frames}}} = \frac{70 \text{ sec}}{\text{film}}$$

4. D

5. C

6. a. 1 year = 52 weeks

b. \$1,053.85

7. C

8. a. 5.5 feet

b. 1,584,000;

$$\text{photos} = \frac{400 \text{ frames}}{\cancel{\text{sec}}} \times \frac{60 \cancel{\text{ sec}}}{1 \cancel{\text{ min}}} \times \frac{66 \cancel{\text{ in.}}}{\text{film}} = 1,584,000 \text{ frames}$$

9. a. 120;  $\frac{1 \text{ student}}{1.5 \text{ min}} \times \frac{x \text{ students}}{180 \text{ min}}$ ,

$$1.5x = 180, x = 120$$

b.  $166\frac{2}{3}$  hr; 400 students  $\times$

$$10 \text{ booths} \times 2.5 \text{ min} = 10,000 \text{ min},$$

$$\frac{10,000 \text{ min}}{1} \times \frac{1 \text{ hr}}{60 \text{ min}} = 166\frac{2}{3}$$

10. D; Each frame =  $1,920 \times 1,080$

$$= 2,073,600 \text{ pixels.}$$

$$\frac{25 \text{ frames}}{1 \cancel{\text{ sec}}} \times \frac{60 \cancel{\text{ sec}}}{1 \text{ min}} = 1,500 \text{ frames per min}$$

$$2,073,600 \text{ pixels} \times 1,500 \text{ min} =$$

$$3,110,400,000 \text{ pixels per min}$$

## Lesson 18-2

11. B; Check students' number lines.

12. \$156

13. C

14. a. 34 in. by 44 in.

b. 1,496 in.<sup>2</sup>

$$\text{c. } 16.1; \frac{1,496}{93.5} = 16$$

15. No; 8:10 is not equal to 10:14.

$$16. \text{ D; } \frac{2 \times 1}{32 \text{ sq. in.}} = \frac{4 \times 4}{s \text{ sq. in.}};$$

$$s = 512 \text{ sq. in.}$$

17. 241.3 mm by 185.67 mm

18. about 269.1 cm<sup>2</sup>