$\qquad$ Name $\qquad$ Period $\qquad$
Use the following information to complete the tables. Then write the equation of proportionality that represents each table.
1)

| 72 |  | 27 |  | 12 |
| :--- | :--- | :--- | :--- | :--- |
| 24 | 18 |  | 7 |  |

$k=$ $\qquad$
Equation $\qquad$
3)

|  | 114 | 72 | 48 |  |
| :--- | :--- | :--- | :--- | :--- |
| 22 |  | 12 |  | 1 |

$k=$ $\qquad$
Equation $\qquad$
$k=$ $\qquad$
2)

|  | 2 |  | 7 |  |
| :---: | :---: | :---: | :---: | :---: |
| 5 | 10 | 20 |  | 65 |

$k=$ $\qquad$
Equation $\qquad$
4)

| 3 |  | 8 |  | 27 |
| :--- | :--- | :--- | :--- | :--- |
| 6 | 14 |  | 42 |  |

Equation $\qquad$
5) XYZ Construction is paving a parking lot. Their plans say that the scale is 2 mm to 6 ft . Sam thinks that the new dimensions for the parking lot would be $13 \mathrm{ft} \times 19 \mathrm{ft}$. Use the model to decide if Sam is correct. Explain why or why not. If he is incorrect, what would the new dimensions be?

6) XYZ Consturction charges a $\$ 2,300$ labor fee for these types of jobs, and an additional $\$ 4.27$ per square foot of asphalt poured. If the company wants their bill to exceed $\$ 3300$, how many square feet of asphalt would they need to pour?
7) If XYZ Construction paves the parking lot from problem 5, will their bill exceed $\$ 3300$ ? Explain.

Simplify the following expressions:
8) $3 s-8 y+5 s-3 y$
9) $-5(-2 x+14)$
10) $4-4(7)-8(-3)$

