## Geometry Review Quiz 3

Name $\qquad$


Figure 3

$\qquad$ 1. In figure 1 , what value for x will make the lines parallel?
[Ch. 3]
A. 20
B. 24
C. 25
D. 33
2. In figure $2, a \| b$. What is x ?
[Ch. 3]
A. $70^{\circ}$
B. $75^{\circ}$
C. $105^{\circ}$
D. $110^{\circ}$
3. In figure 3, $\triangle A B C \sim \triangle L M N$. What is the length of $\overline{A C}$ ?
A. 11
B. 12
C. 22
D. 24
4. Two sides of a triangle measure 14 cm and 8 cm . Which could not be a possible measurement of the third side?
A. 6 cm
B. 8 cm
C. 14 cm
D. 21 cm
$\qquad$ 5. Given the following measurements of a triangle, which is a right triangle?
A. $41 \mathrm{~cm}, 40 \mathrm{~cm}, 9 \mathrm{~cm}$
B. $45 \mathrm{~cm}, 40 \mathrm{~cm}, 35 \mathrm{~cm}$
C. $51 \mathrm{~cm}, 50 \mathrm{~cm}, 48 \mathrm{~cm}$
D. $45 \mathrm{~cm}, 35 \mathrm{~cm}, 25 \mathrm{~cm}$
6. What is the equation in slope intercept form that goes through $(1,4)$ and $(3,10)$.

Remember $\mathrm{y}-\mathrm{y}_{1}=\mathrm{m}\left(\mathrm{x}-\mathrm{x}_{1}\right)$
A. $y=3 x+1$
B. $y=3 x-10$
C. $y=-3 x+10$
D. $y=-3 x-10$
7. Which of the following quadrilaterals has diagonals that bisect at $90^{\circ}$ ?
A trapezoid
B. rectangle
C. rhombus
D. parallelogram
8. If the conditional statement "If you have a laptop, then you have a computer" is represented by $p \rightarrow q$, what is the symbolic representation of "If you have a computer, then you do not have a laptop"?
A. $q \rightarrow \sim p$
B. $\sim q \rightarrow p$
C. $p \rightarrow \sim q$
D. $\sim q \rightarrow \sim p$
$\qquad$ 9. What is the midpoint of a line that has endpoints at $(2,6)$ and $(-2,8)$ ?
A. $(0,7)$
B. $(1,14)$
C. $(1,7)$
D. $(0,14)$
10. Which statement is the inverse of "if you like sugar, you are sweet"?
A. If you are sweet, you like sugar.
B. If you are not sweet, then you do not like sugar.
C. If you don't like sugar, then you are not sweet.
D. If you like sugar, you are sweet.

