Algebra 1 ECA Remediaiton

Name Answer Key

Homework 23.3

Find each product.

1) $(6b+3)(6b+3)$

$6b(6b) + 6b(3) + 3(6b) + 3(3)$

$36b^2 \underbrace{+18b + 18b} + 9$

$36b^2 + 36b + 9$

2) $(2n+5)(6n+7)$

$2n(6n) + 2n(7) + 5(6n) + 5(7)$

$12n^2 \underbrace{+14n + 30n} + 35$

$12n^2 + 44n + 35$

3) $(-7v+8)(5v-2)$

$-7v(5v) - 7v(-2) + 8(5v) + 8(-2)$

$-35v^2 \underbrace{+14v + 40v} - 16$

$-35v^2 + 54v - 16$

4) $(2a+7)^2$

$(2a+7)(2a+7)$

$2a(2a) + 2a(7) + 7(2a) + 7(7)$

$4a^2 \underbrace{+14a + 14a} + 49$

$4a^2 + 28a + 49$

5) $(4n-2)^2$

$(4n-2)(4n-2)$

$4n(4n) + 4n(-2) - 2(4n) - 2(-2)$

$16n^2 \underbrace{-8n - 8n} + 4$

$16n^2 - 16n + 4$

6) $(6x+5)^2$

$(6x+5)(6x+5)$

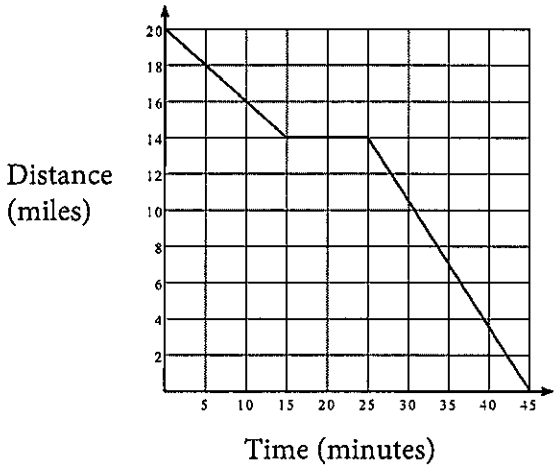
$6x(6x) + 6x(5) + 5(6x) + 5(5)$

$36x^2 \underbrace{+30x + 30x} + 25$

$36x^2 + 60x + 25$

Kim rode her bicycle home from work. The graph below shows Kim's distance from home over time.

Kim's Bicycle Ride Home



7) On what time interval is Kim stopped?

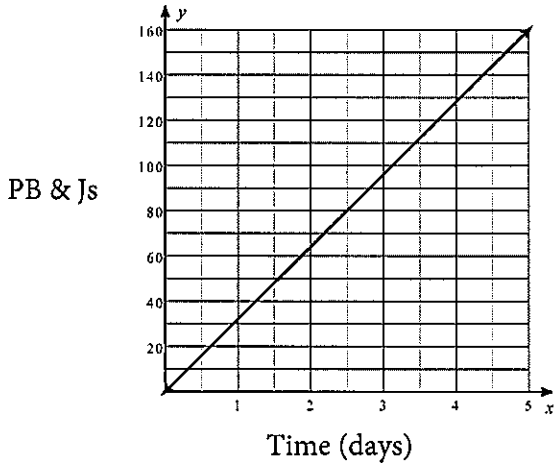
15 min to 25 min

8) On what time interval is Kim traveling the fastest?

25 min to 45 min

The graph below represents the total number of times a PB&J is eaten at an elementary school over a 5 - day period.

PB&Js Eaten



9) What is the slope of this line segment? Include the appropriate units in your answer.

$\frac{160 \text{ PB+J's}}{5 \text{ days}} = 32 \text{ PB+J's/day}$

10) Write an equation that represents the total number of PB&Js, P, are sent after, d, days.

$P = 32d$

11) If this trend continues, how many PB&Js will be eaten in 10 days?

$P = 32(10)$

$P = 320$ PB+J's

Answers to Homework 23.3

1) $36b^2 + 36b + 9$ 2) $12n^2 + 44n + 35$ 3) $-35v^2 + 54v - 16$ 4) $4a^2 - 28a + 49$
5) $16n^2 - 16n + 4$ 6) $36x^2 + 60x + 25$

7) 15 minutes to 25 minutes 8) 25 minutes to 45 minutes 9) $\frac{32}{1}$ PB&Js per Day

10) P = 32d 11) 320 PB&Js