<u>Coordinate Geometry</u> (D)

Chapter 5

Hagen/Templeton/Vanderheide

	Description and Homework
Getting Started *Pg. 237*	Warm Up Activities
Relations as Ordered Pairs *Section 5.1* *Pg. 240-245*	✔Terminology of the Coordinate Plane ✔Graphing Ordered Pairs ✔Table of Values ✔Domain and Range **Classwork P243-4**: 1 orally, 2, 4, 6, 9, 10, 13, 14a, c, e, 15a, c, e, 16, 19, 20, 25 **Homework P243-245**: 3, 5, 7, 8, 11, 12, 14b, d, f, 17, 18, 21, 22, 23 Bonus P244: 26, 27
Graphing Ordered Pairs *Section 5.2* *Pg. 246-249*	✔Graphing Equations: Table of values **Classwork P248-249**: 1-15, 17, 19, 20, 22, 23, 28, 29, 30, 31, 40a, 41 **Homework P248-249**: 16, 18, 21, 24, 25, 26, 27, 40b, e, 42
Graphing Linear Relations *Section 5.3* *Pg. 250-253*	✔First Quadrant Graphs **Classwork P252-253**: 1, 3, 6, 9 **Homework P252-253**: 2, 4, 5, 10
Graphing Linear Equations *Section 5.4* *Pg. 254-258*	✔Unique lines: x = a, y = a, x = ay **Classwork P257-258**: 1, 4, 6, 7, 10, 11, 13, 17**,** 21, 23 **Homework P257-258**: 2, 3, 5, 8, 9, 12,18, 22, 24, 26
Intersecting Lines *Section 8.7* *Pg. 439-441*	✔x & y intercepts **Classwork P441**: 1, 3, 6, 9, 11, 13**,** 14 **Homework P441**: 2, 4, 7, 10, 12, 15, 16, 17, 18
Slope of a Straight Line Questions on Reverse	✔ **Rise/Run** ✔ **m = △Y/△X** **Classwork**: 1, 2, 3, 4, 8, 10, 12 **Homework**: 5, 7, 9, 11, 13
Review	Pg.290: 1-18, Pg. 444: 1-7, Pg.445: 60-63
Chapter Check	Pg. 292: 1-10, Pg. 446: 1-4, 17-19
Unit Test	Tentative: April 28/29 Turn Page Over

m = Slope

April 18/16

m AB is positive

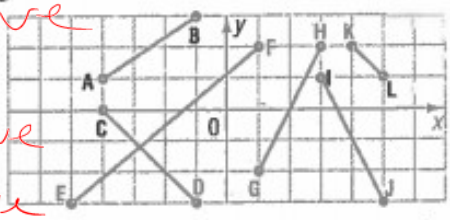
m CD is negative

m EF is positive

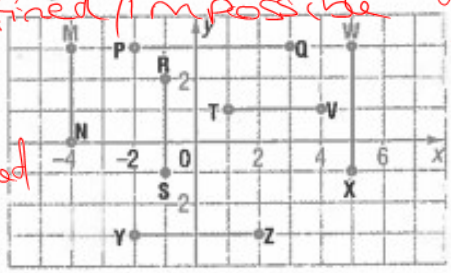
m GH is positive

Practice

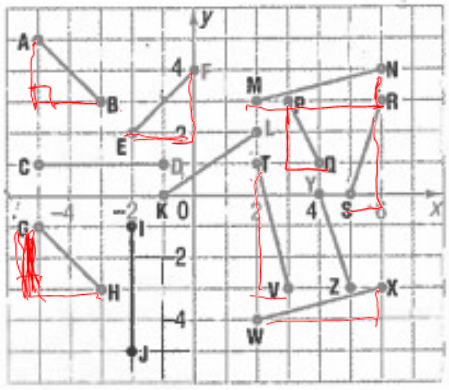
1. State whether each slope is positive or negative.



2. State the slope and the equation of each line segment.



3. State the slope of each line segment.



Determine the slope of the line passing through each pair of points.

4. A(5, 9), B(7, 8)

5. C(3, 4), D(7, 4)

6. M(9, 3), N(0, 1)

7. P(0, −5), Q(0, 4)

8. K(2, 5), L(0, 8)

9. A(−2, −3), B(3, 3)

State whether the slope is positive or negative for each pair of points.

10. C(3, 4), D(−2, −5)

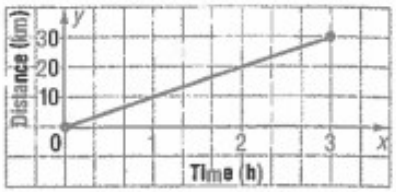
11. P(−1, 3), Q(0, 2)

12. M(−6, 0), N(4, 5)

13. X(3, 5), Y(7, 2)

Problems and Applications

14. The graph shows how far Danzel cycled in 3 h.



a) About how far did he travel in 2 h 45 min?

b) About how long did it take him to cycle 15 km?

c) What does the slope of this line tell you?

15. a) On the same grid, draw a line through A(1, 4) and B(−2, 2) and a line through P(−1, −1) and Q(2, 1).

b) Calculate the slope of each line in part a).

c) Use your answer to part b) to explain why these lines are parallel.

16. a) Plot the points P(−4, 2), Q(−1, −2), R(4, −2), and S(1, 2). Join PQ, QR, RS, and S

b) Draw diagonals PR and QS.

c) The diagonals PR and QS are perpendicular to each other. Find the slope of each diagonal. How are the slopes related?

d) Is this relationship true for any pair of perpendicular lines?

17. The lengths of 2 ski slopes are 625 m and 760 m. The horizontal distance from the start of the run to the end of the run for both slopes is 300 m.

a) What is the height of the higher ski slope to the nearest metre?

b) Which of the 2 ski slopes is steeper? Explai

NUMBER POWER

Find the values of x and y that make the following true.

$$\frac{x^y}{y^x} = 1, x \neq y$$