7 Chapter 7 Review

***Mathematics 10*, pages 396–398**

Suggested Timing

60–90 min

Materials

- grid paper
- ruler

Blackline Masters

BLM 7–6 Section 7.1 Extra Practice
BLM 7–7 Section 7.2 Extra Practice
BLM 7–9 Section 7.3 Extra Practice
BLM 7–10 Section 7.4 Extra Practice

Planning Notes

Have students work individually on #1 and 2. Ensure that students can identify the slope and *y*-intercept from the equation of a line and that they can determine the equation if given both of these parameters.

Have students who are not confident with a specific form of linear equations discuss strategies with another classmate. Encourage students to refer to their chapter Foldable, summary notes, classroom-developed posters, worked examples, and previously completed questions in the related student resource.

Encourage students to make a list of questions that they found difficult and to use this list to help prepare for the practice test.

Meeting Student Needs

- Students who require more practice on a particular topic may refer to **BLM 7–6 Section 7.1 Extra Practice**, **BLM 7–7 Section 7.2 Extra Practice**, **BLM 7–9 Section 7.3 Extra Practice**, and **BLM 7–10 Section 7.4 Extra Practice**.
- You may wish to provide students with a copy of the student outcomes. Have students rate their level of understanding for each outcome. Students can then use their responses to direct them as to which topics to begin their review with.
- You may wish to review the Key Ideas for each section and summarize the points on the board or overhead.
- Allow students to create flash cards to help them study the chapter's key terms and formulas.
- Keep all posters and chart papers displayed in the classroom while students complete the review questions.

Enrichment

- Builders often need to ensure that structures are "square," meaning perpendicular. They also need to check that structures that need to be parallel are parallel. Challenge students to explain how using triangle facts can be used to check for accuracy, and why the bigger the triangle, the greater the accuracy. (Example: Builders often use 3-4-5 triangles to ensure right angles. Builders use a tape measure to find a 3-ft distance on one wall and a 4-ft distance on another wall. If the distance between those two points is 5 ft, then the angle between the walls is 90°. If the builder uses a 6-8-10 triangle instead, the accuracy improves because the percent of error in the measurement is diminished by the greater distance.)

Gifted

- Challenge students to explore the following question: "If parallel lines never meet and are the same distance apart, are concentric circles parallel?" Have students explain their reasoning in terms of the similarities and differences between parallel and concentric lines. (Example: In plane geometry a line is straight but in solid geometry it may be curved. The main thought on this seems to be that there are parallel curves and parallel lines.)
- Some students may already be familiar with the skills handled in this review. To provide enrichment and extra challenge for gifted students, go to www.mhrmath10.ca and follow the links.

Common Errors

- Some students isolate the *y*-term and then read the *y*-intercept and slope from the equation. For example, in #1b), students rewrite the equation as $6y = 5x + 12$ and state the slope as 5 and the *y*-intercept as 12.

R$_x$ Have students practise rearranging equations to isolate a specified variable. Encourage students to check their work, for example, by verifying that the coordinates of the *y*-intercept satisfy the equation.

Assessment	Supporting Learning
Assessment *for* Learning	
Chapter 7 Review The Chapter 7 Review is an opportunity for students to assess themselves by completing selected questions in each section and checking their answers against the answers in the back of the student resource.	• Have students check the contents of the What I Need to Work On section of their Foldable and do at least one question related to each listed item. • Have students revisit any section that they are having difficulty with prior to working on the chapter test.