

Texas Education Agency Student Assessment Division January 2014

STAAR Grade 7 Mathematics

- (7.4) The student applies mathematical process standards to represent and solve problems involving proportional relationships. The student is expected to
  - (E) convert between measurement systems, including the use of proportions and the use of unit rates. Supporting Standard
- (7.5) The student applies mathematical process standards to use geometry to describe or solve problems involving proportional relationships. The student is expected to
  - (A) generalize the critical attributes of similarity, including ratios within and between similar shapes; Supporting Standard
  - (B) describe  $\pi$  as the ratio of the circumference of a circle to its diameter; and Supporting Standard
  - (C) solve mathematical and real-world problems involving similar shape and scale drawings. *Readiness Standard*
- (7.9) The student applies mathematical process standards to solve geometric problems. The student is expected to
  - solve problems involving the volume of rectangular prisms, triangular prisms, rectangular pyramids, and triangular pyramids; Readiness Standard
  - (B) determine the circumference and area of circles; Readiness Standard
  - (C) determine the area of composite figures containing combinations of rectangles, squares, parallelograms, trapezoids, triangles, semicircles, and quarter circles; and Readiness Standard
  - (D) solve problems involving the lateral and total surface area of a rectangular prism, rectangular pyramid, triangular prism, and triangular pyramid by determining the area of the shape's net. Supporting Standard

(7.11)

- (D) use a family budget estimator to determine the minimum household budget and average hourly wage needed for a family to meet its basic needs in the student's city or another large city nearby; Supporting Standard
- (E) calculate and compare simple interest and compound interest earnings; and Supporting Standard
- (F) analyze and compare monetary incentives, including sales, rebates, and coupons. Supporting Standard