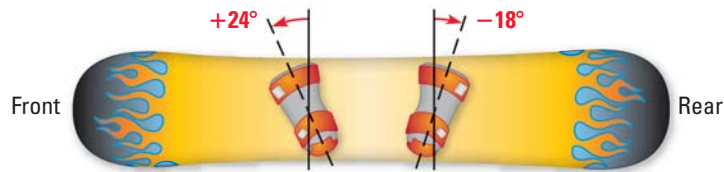47. **SNOWBOARDS** Snowboarders can rotate the shoe bindings on their snowboards. The binding setup shown below is written +24°/−18°. This means that the front angle is 24° counterclockwise from vertical, and the rear angle is 18° clockwise from vertical.

+24°   −18°

Front   Rear

   a. An instructor suggests a binding setup of +30°/+15° for beginners. Your setup is initially +24°/−4°. Find the changes in angle measures needed to match the instructor's suggestion.

   b. A mirror setup is a setup of +n°/−n° where n is between 0 and 90. Your setup is initially +13°/−6°. You change the front angle measure by −3°. Find the change in the rear angle measure needed for a mirror setup.

48. **CHALLENGE** Greenwich Mean Time (GMT) is the time at the Royal Observatory in Greenwich, England. A location that is +n hours from GMT is n hours ahead of GMT, and a location that is −n hours from GMT is n hours behind GMT. Costa Rica is −6 hours from GMT, and India is +5.5 hours from GMT. If it is 7:45 A.M. in India, what time is it in Costa Rica?

TAKS **PRACTICE** at classzone.com

MIXED REVIEW FOR TAKS

49. ⬇ **TAKS PRACTICE** The domain of the function $y = 3x − 1$ is 2, 5, and 10. What is the range of the function? *TAKS Obj. 2*

   (A) 4, 14, and 29   (B) 5, 11, and 14   (C) 5, 11, and 29   (D) 5, 14, and 29

50. ⬇ **TAKS PRACTICE** How many times greater is the area of a circle with a diameter of $4x$ units than the area of a circle with a diameter of x units? *TAKS Obj. 8*

   (F) 2   (G) 4   (H) 8   (J) 16

QUIZ for Lessons 2.1–2.3

1. Tell whether each of the following numbers is a whole number, an integer, or a rational number: $−\frac{5}{6}$, −8.2, 0, −9. Then order the numbers from least to greatest. *(p. 64)*

Find the sum or difference.

2. $5 + (−36)$ *(p. 74)*   3. $−8.2 + (−2.3)$ *(p. 74)*   4. $3\frac{1}{2} + (−2)$ *(p. 74)*

5. $−18 − (−9)$ *(p. 80)*   6. $−11.2 − 21.7$ *(p. 80)*   7. $4\frac{1}{2} − \left(−\frac{1}{5}\right)$ *(p. 80)*

Evaluate the expression when $x = 2.5$ and $y = −3.4$. *(p. 80)*

8. $x + y − 9$ 9. $x − (y − 5.1)$ 10. $12.1 − (y − x)$