

## Exercises For Section 1.2

Simplify each of the following numerical expressions.

1.  $6 + 4 \div 2$

2.  $(6 + 4) \div (-2)$

3.  $-5 + 3 \cdot 2$

4.  $-6^2$

5.  $(-6)^2$

6.  $2(-8) - 3(-2)$

7.  $12 - 2(-3)$

8.  $(12 - 2)(-3)$

9.  $-2 \cdot 3^2$

10.  $(-2 \cdot 3)^2$

11.  $10 - 2^3(-5)$

12.  $-6 - 4 + 30 \div (-5)$

13.  $3(-4) - 2(-8)$

14.  $-2(-5) + (-15) - 2(3)$

15.  $(-3)^2 - 5(-3) - 1$

16.  $3^2 - 5(3) - 1$

17.  $2(4)^2 - 6(-4) + 1$

18.  $2(-4)^2 + 6(-4) - 20$

19.  $\frac{-8 - (-4)}{4 - 8}$

20.  $\frac{6 - 10}{-4 + 2}$

21.  $\frac{-9 - 6}{3 - (-2)}$

22.  $2^3 - 5(2)^2 - 6(2 - 3)$

23.  $(-2)^3 - 5(-2)^2 - 6(-2 + 3)$

24.  $3^2 - 2^3(1 - 4)$

25.  $-3[4 - 5(2 - 6)]$

26.  $10 - 5[5 - 2(3 - 5)]$

27.  $[-6 + 2(1 - 4)] \div 3 - 6$

28.  $\frac{-2^4}{(-4)^2}$

29.  $\frac{2(-3)^3}{4 - (-5)}$

30.  $-11 + 2\{-5 - 6[-1 - 3(2 - 7)]\}$

### Digging Deeper

31. In September 2000, one of Saskatoon's large department stores ran a back-to-school contest to attract parents and their children. On the official entry form the following skill-testing question was asked:  $200 - 132 \times 2 + 64 \div 5$ .

- Evaluate this numerical expression. The answer is not an integer.
- The answer they were looking for was likely 40. Insert parentheses into the expression so that it will have a value of 40.
- Enter this expression, as it appears from left to right, into your calculator. What value does your calculator show? If your calculator shows 40, it's time to buy a new one.