Order of Operations: Worked Answers

Each problem solved the way the lesson does it.

Name: _____ Date: _____

1. **−5 + 3 × (−4)**
   - Times first: 3 × (−4) = −12.
   - Add: −5 + −12.

   Answer: **−17**

2. **(−15 + 3) ÷ (−4)**
   - Groups: −15 + 3 = −12.
   - Divide: −12 ÷ (−4). Same signs, positive.

   Answer: 3

3. **18 − 5 × (−2)**
   - Times first: 5 × (−2) = −10.
   - Change the subtraction: 18 − (−10) = 18 + 10.

   Answer: 28

4. **(6 + 9) over 5, written as a fraction**
   - Groups: the top is 6 + 9 = 15.
   - Divide: 15 ÷ 5.

   Answer: 3

5. **(−10 − 2) over (−4 + 1), written as a fraction**
   - Top: −10 + −2 = −12. Bottom: −4 + 1 = −3.
   - Divide: −12 ÷ (−3). Same signs, positive.

   Answer: 4

6 **−3(2 − 8) + 4**

- Groups: 2 − 8 = −6.
- Times: −3 × (−6) = 18.
- Add: 18 + 4.

Answer: 22

7 **1 fourth − (−1 half) × 3**

- Times first: (−1 half) × 3 = −3 halves.
- 1 fourth + 3 halves = 1 fourth + 6 fourths.

Answer: 7 fourths, which is 1 and 3 fourths

8 **(−2 thirds) over (1 third), a complex fraction**

- A complex fraction is division: −2 thirds ÷ 1 third.
- Flip and multiply: −2 thirds × 3.

Answer: −2