

1. An airplane falls from 4000 feet to 2000 feet in 100 seconds. How fast is the airplane falling?
- (A) 10 feet/sec
(B) 20 feet/sec
(C) 5 feet/sec
(D) 100 feet/sec
(E) 200 feet/sec

$$\frac{4000 - 2000}{100} = \frac{2000}{100} = 20 \text{ feet/sec}$$

2. An airplane falls from 6000 feet to 3000 feet in 200 seconds. How fast is the airplane falling?
- (A) 30 feet/sec
(B) 20 feet/sec
(C) 5 feet/sec
(D) 15 feet/sec
(E) 200 feet/sec

$$\frac{6000 - 3000}{200} = \frac{3000}{200} = 15 \text{ feet/sec}$$

3. An airplane falls from 8000 feet to 3000 feet in 50 seconds. How fast is the airplane falling?
- (A) 40 feet/sec
(B) 100 feet/sec
(C) 5 feet/sec
(D) 15 feet/sec
(E) 60 feet/sec

$$\frac{8000 - 3000}{50} = \frac{5000}{50} = 100 \text{ feet/sec}$$

4. An airplane falls from 10000 feet to 5000 feet at 50 feet/second. How long does it take to fall?
- (A) 200 seconds
(B) 100 seconds
(C) 300 seconds
(D) 10 seconds
(E) 5 seconds

$$\frac{10000 - 5000}{50} = \frac{5000}{50} = 100 \text{ seconds}$$

5. An airplane falls from 8000 feet to 5000 feet at 10 feet/second. How long does it take to fall?
- (A) 200 seconds
(B) 100 seconds
(C) 300 seconds
(D) 10 seconds
(E) 5 seconds

$$\frac{8000 - 5000}{10} = \frac{3000}{10} = 300 \text{ seconds}$$

6. An airplane falls from 2000 feet to 1000 feet at 100 feet/second. How long does it take to fall?
- (A) 5 seconds
(B) 10 seconds
(C) 15 seconds
(D) 100 seconds
(E) 50 seconds

$$\frac{2000 - 1000}{100} = \frac{1000}{100} = 10 \text{ seconds}$$

7. An airplane starts at 8000 feet and falls for 10 seconds at 100 feet/second. How high will it then be?
- (A) 6000 feet
 - (B) 7000 feet
 - (C) 5000 feet
 - (D) 4000 feet
 - (E) 9000 feet

$$8000 - 10 \cdot 100 = 8000 - 1000 = 7000 \text{ feet}$$

8. An airplane starts at 4000 feet and falls for 40 seconds at 50 feet/second. How high will it then be?
- (A) 6000 feet
 - (B) 7000 feet
 - (C) 5000 feet
 - (D) 2000 feet
 - (E) 9000 feet

$$4000 - 40 \cdot 50 = 4000 - 2000 = 2000 \text{ feet}$$

9. An airplane starts at 10000 feet and falls for 100 seconds at 100 feet/second. How high will it then be?
- (A) 10000 feet
 - (B) 1000 feet
 - (C) 100 feet
 - (D) 0 feet
 - (E) 10 feet

$$10000 - 100 \cdot 100 = 10000 - 10000 = 0 \text{ feet}$$