

Error Intervals and Bounds

Write these error intervals.

- (a) 50 cm to the nearest 10 cm
- (b) 150 cm to the nearest 10 cm
- (c) 800 g to the nearest 10 g
- (d) 800 g to the nearest 100 g
- (e) 500 m to the nearest 100 m
- (f) 500 m to the nearest 10 m
- (g) 500 m to the nearest m
- (h) 5 m to the nearest m
- (i) 55 g to the nearest g
- (j) 87 g to the nearest g

- (a) $45 \leq x < 55$
- (b) $145 \leq x < 155$
- (c) $795 \leq x < 805$
- (d) $750 \leq x < 850$
- (e) $450 \leq x < 550$
- (f) $495 \leq x < 505$
- (g) $499.5 \leq x < 500.5$
- (h) $4.5 \leq x < 5.5$
- (i) $54.5 \leq x < 55.5$
- (j) $86.5 \leq x < 87.5$

Write these error intervals.

- (a) 4.5 cm to 1 decimal place
- (b) 7.5 cm to 1 decimal place
- (c) 37.5 cm to 1 decimal place
- (d) 37.4 m to 1 decimal place
- (e) 30.4 g to 1 decimal place
- (f) 30.9 g to 1 decimal place
- (g) 30.0 g to 1 decimal place

- (a) $4.45 \leq x < 4.55$
- (b) $7.45 \leq x < 7.55$
- (c) $37.45 \leq x < 37.55$
- (d) $37.35 \leq x < 37.45$
- (e) $30.35 \leq x \leq 30.45$
- (f) $30.85 \leq x < 30.95$
- (g) $29.95 \leq x < 30.05$

Write the error intervals.

- (a) 500 g to 1 significant figure
- (b) 100 cm to 1 significant figure
- (c) 50 cm to 1 significant figure
- (d) 20 cm to 1 significant figure
- (e) 5 m to 1 significant figure
- (f) 2 m to 1 significant figure

- (a) $450 \leq x < 550$
- (b) $95 \leq x < 150$
- (c) $45 \leq x < 55$
- (d) $15 \leq x < 25$
- (e) $4.5 \leq x < 5.5$
- (f) $1.5 \leq x < 2.5$

Write the upper and lower bounds.

- (a) 347 cm to the nearest cm
- (b) 80 g to 1 significant figure
- (c) 54.6 m to 1 decimal place
- (d) 45.86 g to 2 decimal places
- (e) 52 cm to 2 significant figures

- (a) UB = 347.5 cm LB = 346.5 cm
- (b) UB = 85 g LB = 75 g
- (c) UB = 54.65 m LB = 54.55 m
- (d) UB = 45.865 g LB = 45.855 g
- (e) UB = 52.5 cm LB = 51.5 cm