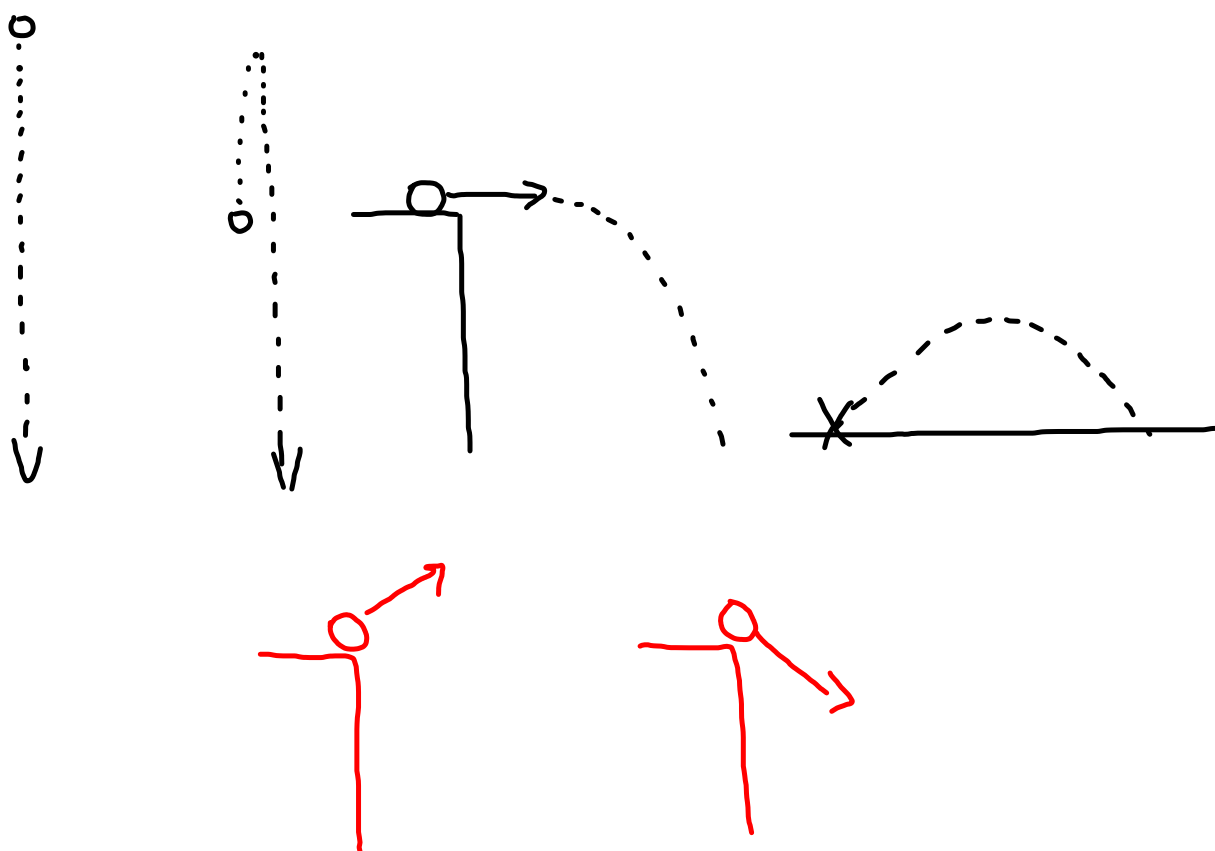


When do we need to use a quadratic formula?



Ex.1 A stone is thrown at angle of 30.0° *below* the horizontal. The initial speed is 12m/s and the time in the air is 5.6s.

- (a) What was the height of the cliff?
- (b) Find the range.

Ex2. A cannon on a 125 m high cliff fires a projectile with an initial velocity of 42 m/s at an angle of $[27^\circ \text{SofE}]$.

Find:

- a) range
- b) final velocity

$$\vec{V}_{\text{NET}} = 64.9 \text{ m/s [R55°D]}$$

p. 113 # 5, 6, 8

p. 114 # 16 - 30

** 2 days*

**demonstrate 18 for the slow pokes*

