Parallax

$$\text{distance} = \frac{1}{1/36 \text{ arcsecs}}$$

$$\text{distance} = 36 \text{ pc}$$

$$.9 = \frac{9}{10} \qquad \text{dist} = \frac{1}{9/10}$$

$$\text{distance} = \frac{10}{9} \text{ parsec}$$

$$\text{distance (parsecs)} = \frac{1}{\text{parallax angle (arcsec}}$$

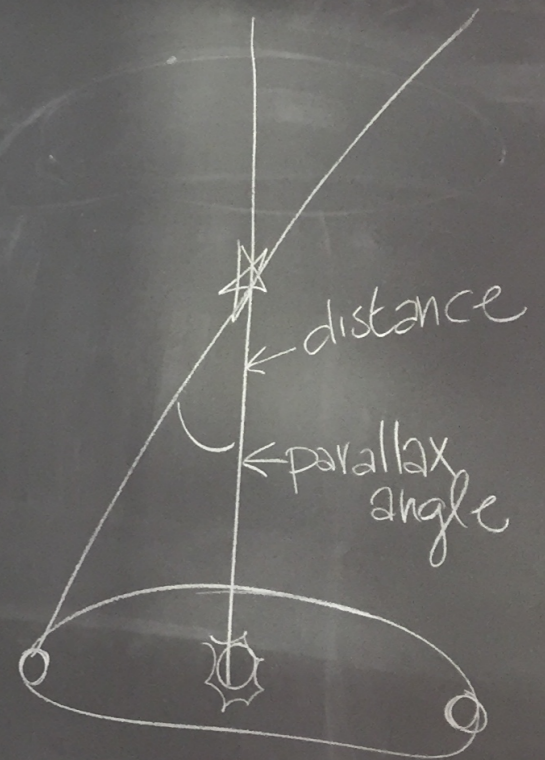$1 \text{ pc} = 3.26 \text{ ly}$ & corresponds to a parallax angle of 1 arcsecond.

So...

distance is inversely proportional to
        parallax angle —

small angle ⟶ big distance
large angle ⟶ small distance.

distance

parallax
angle

Working with Fractions

$$\frac{1}{\frac{1}{x}} = x$$

The denominator of the denominator (bottom of the fraction) becomes the numerator (top of the fraction).

$$\frac{1}{\frac{1}{2}} = 2$$

The meaning of significant figures