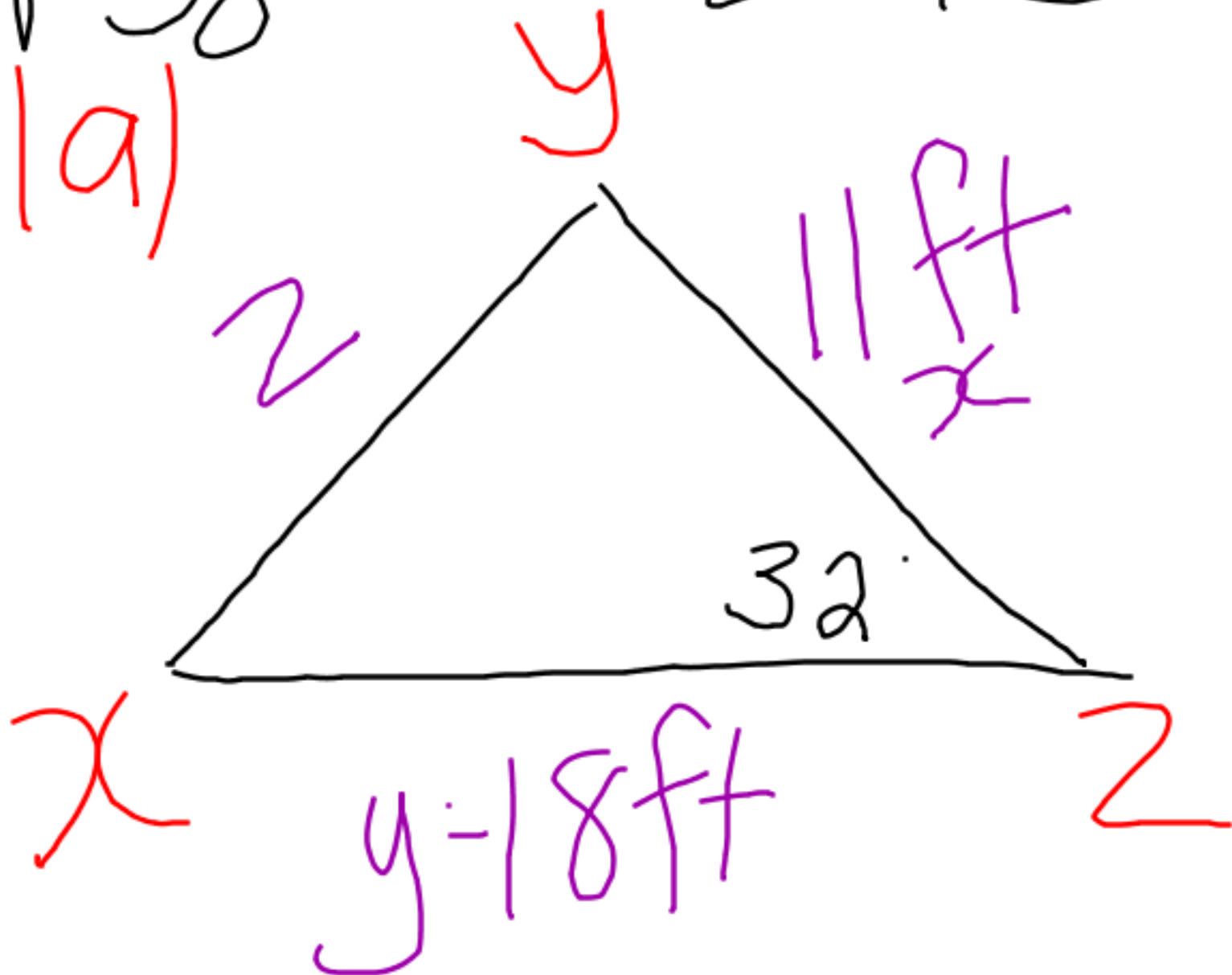


P38 Cosine Law

1a)



3 Sides

SAS Side
10 39 9

$$z^2 = 109.12$$

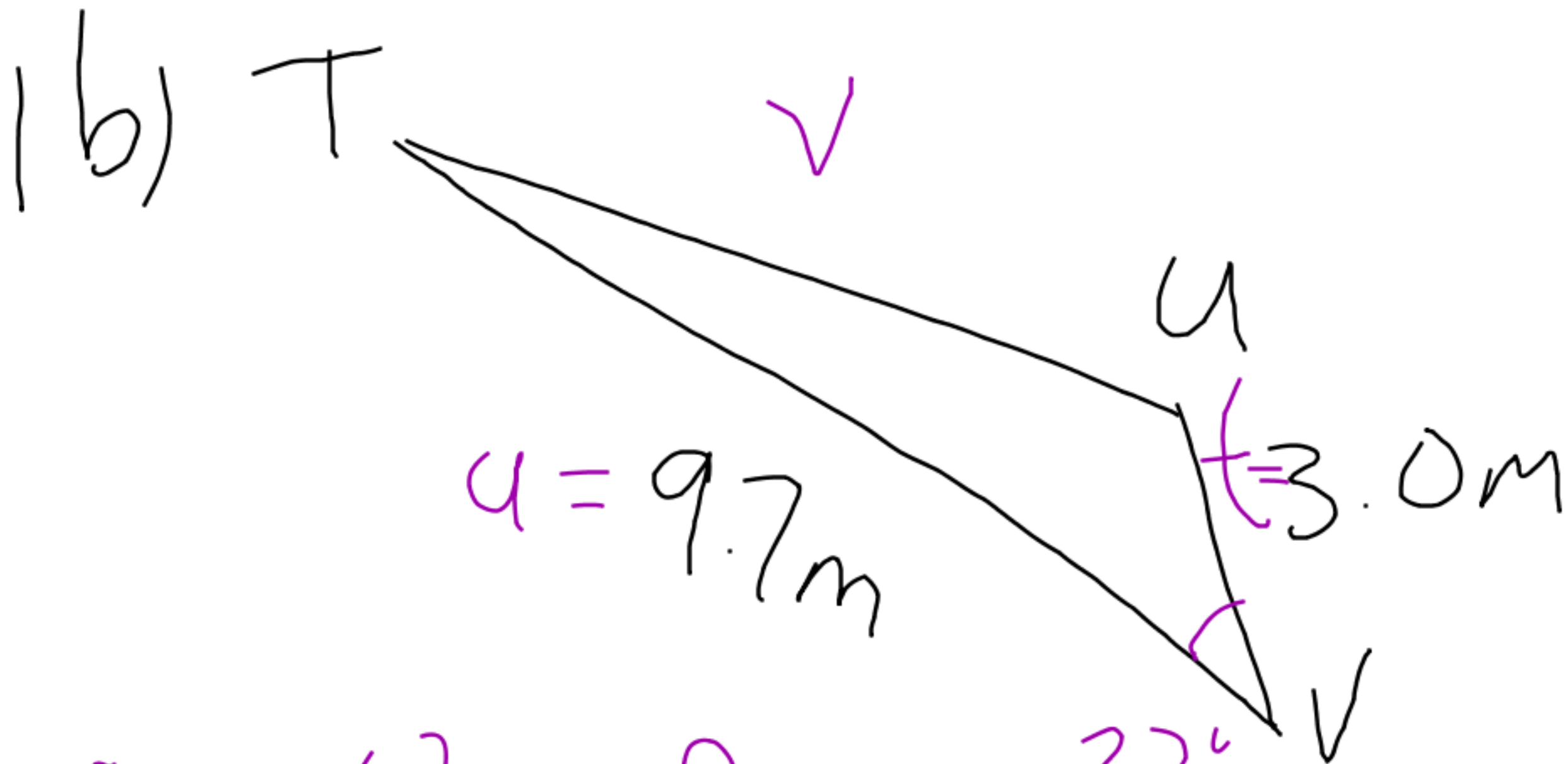
$$z = 10.45\text{ ft}$$

$$z^2 = x^2 + y^2 - 2xy(\cos Z)$$

$$z^2 = 11^2 + 18^2 - 2(11)(18)(\cos 32^\circ)$$

$$z^2 = 121 + 324 - 396(0.8480)$$

$$z^2 = 445 - 335.808$$

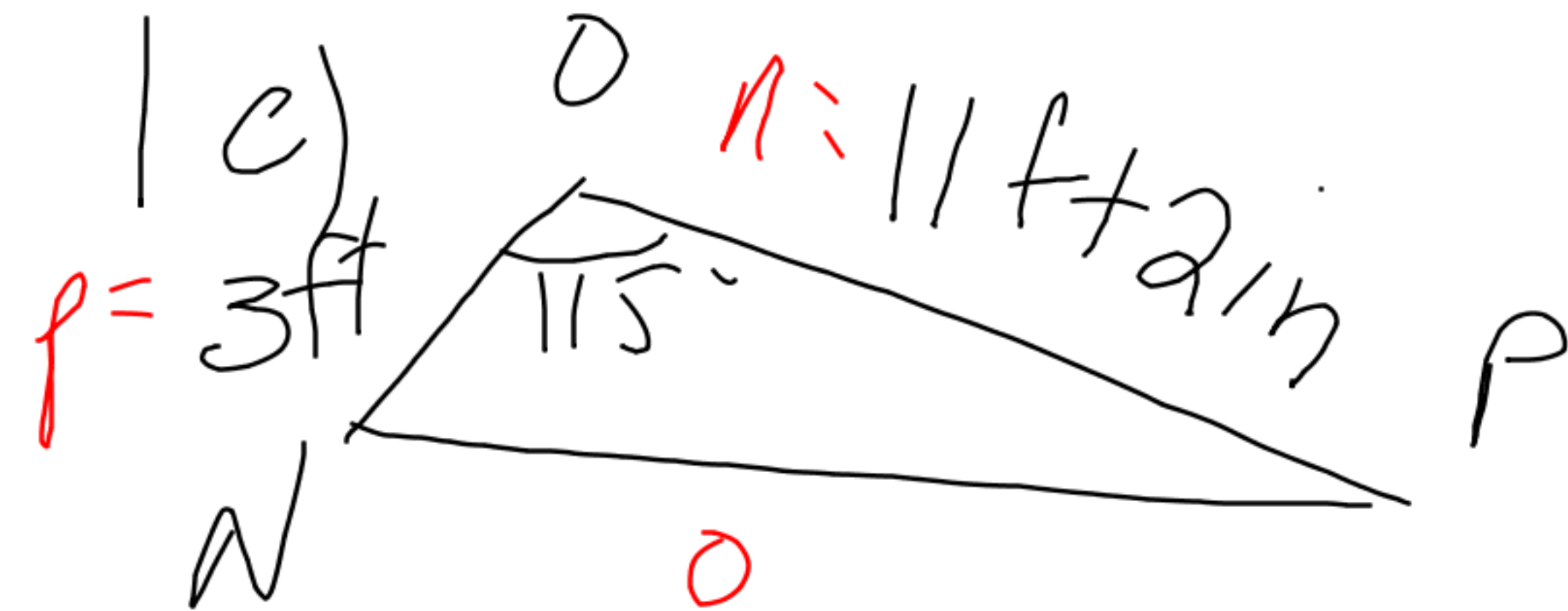


$$V^2 = t^2 + u^2 - 2tu(\cos V)$$

$$V^2 = 3^2 + (9.7)^2 - (2(3)(9.7)(\cos 22^\circ))$$

$$\sqrt{V^2} = \sqrt{49.1278}$$

$$V = 7.01\text{m}$$



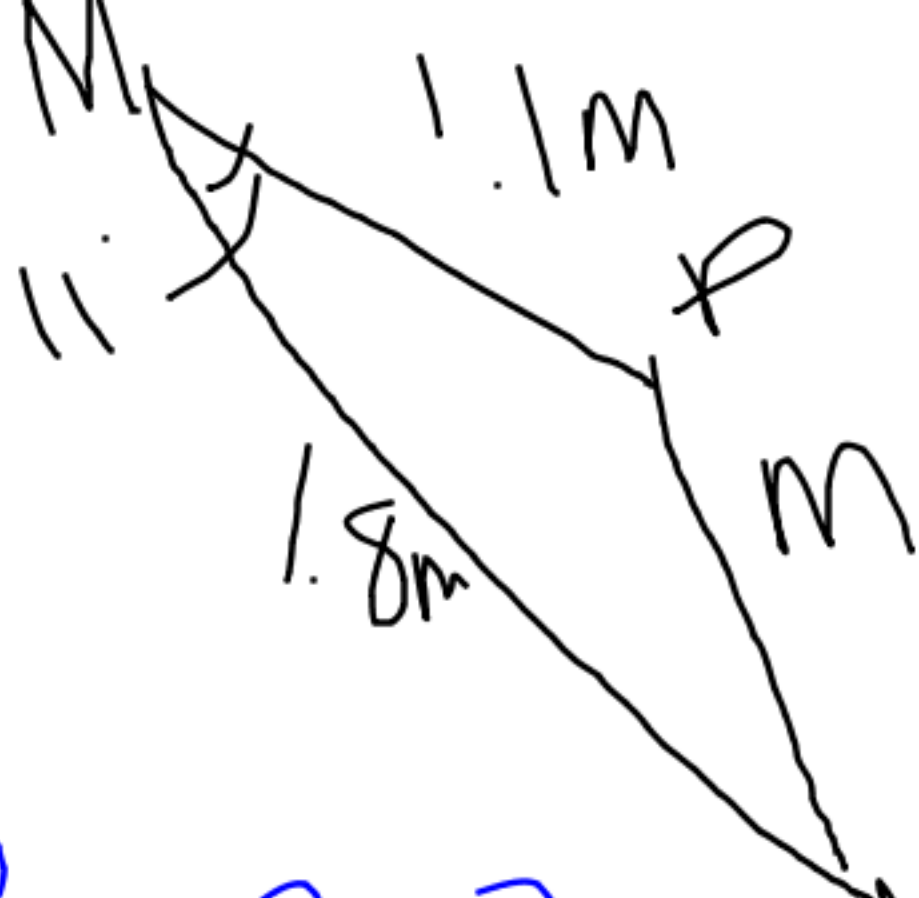
$$0^2 = p^2 + n^2 - 2pn (\cos 0)$$

$$0^2 = \sqrt{3^2 + (11.16)^2 - 2(3)(11.16)(\cos 115)}$$

$$0^2 =$$

$$0 = 11.91 \text{ ft}$$

3a)



$$m^2 = n^2 + p^2 - 2np(\cos M)$$

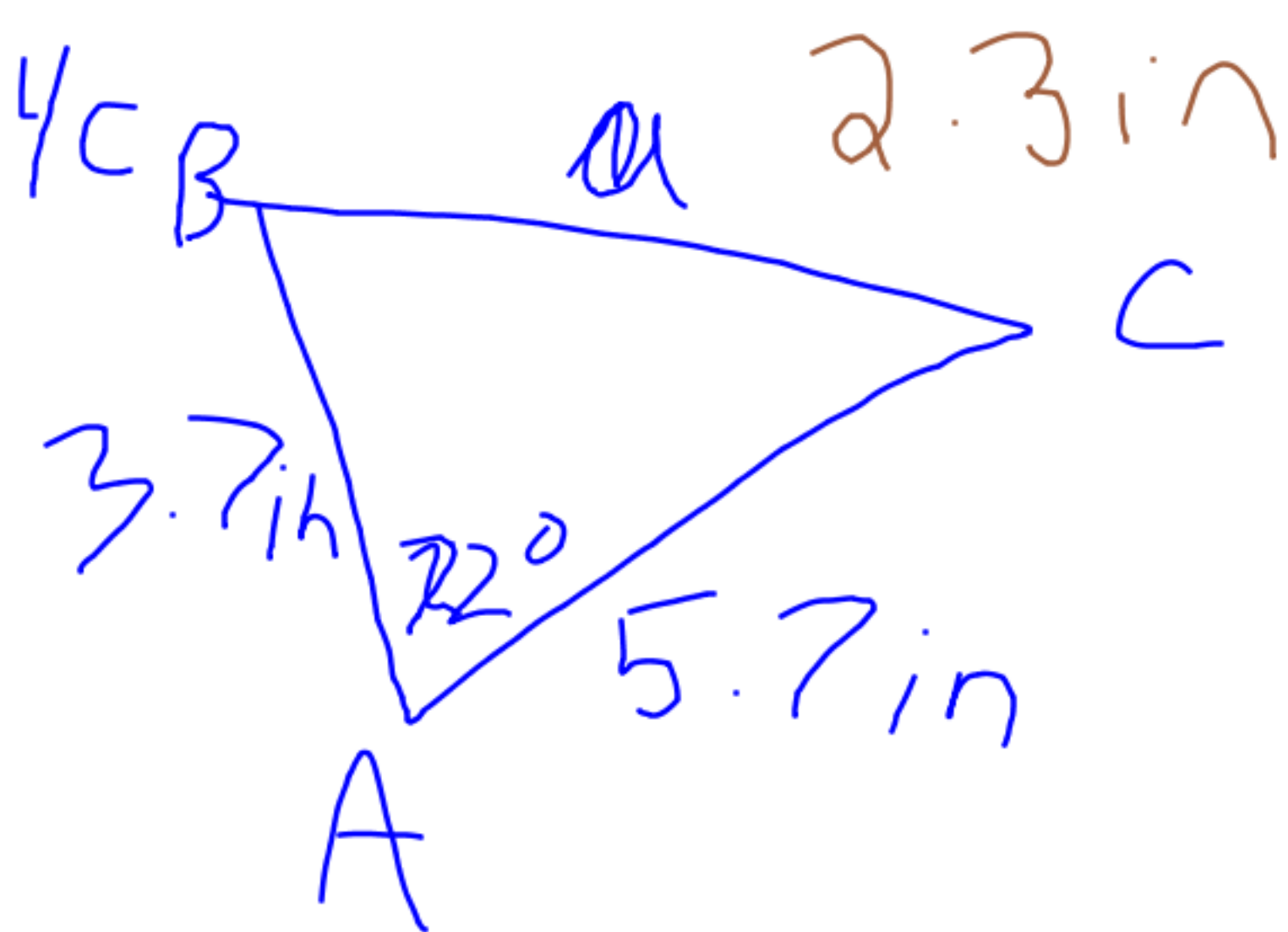
$$m^2 = 1.1^2 + 1.8^2 - 2(1.1)(1.8)(\cos 11)$$

$$m^2 = 1.21 + 3.24 - 3.96(0.9816)$$

$$m^2 = 4.45 - 3.8871$$

~~$$m^2 = 0.5629$$

$$m = 0.75 M$$~~



$$a^2 = b^2 + c^2 - 2(b)(c)(\cos A)$$

$$a^2 = 5.7^2 + 3.7^2 - 2(5.7)(3.7)(\cos 72)$$

$$a^2 = 46.18 - 42.18 (\cos 72)$$

$$a^2 = 46.18 - 40.7986$$

$$\sqrt{a^2} = \sqrt{5.3814}$$

$$a = 2.3$$

P. 38

3bc

4ab

} homework