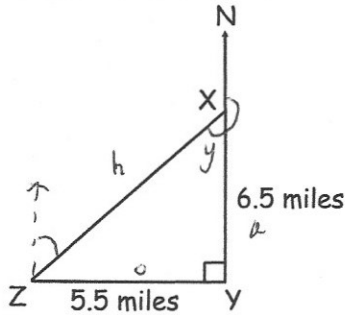




Factorise

$$4y^2 - 81$$

$$(2y - 9)(2y + 9)$$



Calculate the distance XZ.

$$5.5^2 + 6.5^2 = XZ^2$$

$$XZ^2 = 72.5$$

$$XZ = 8.5147 \text{ miles}$$

What is the bearing of Z from X?

$$\tan y = \frac{5.5}{6.5}$$

$$y = 40.236\dots$$

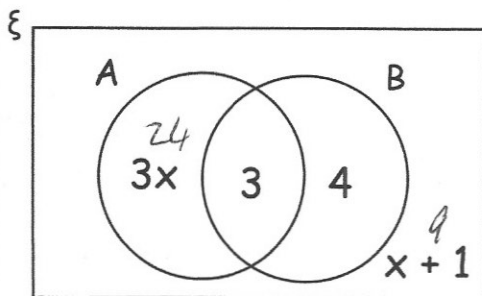
$$180 + 40.236\dots = 220.24^\circ$$

What is the bearing of X from Z?

$$040.2^\circ$$

=

A chef is considering adding two new dishes to her menu.
40 people try dish A and dish B.
The Venn diagram shows information about the dishes that they liked.



If 75% of people liked a dish, it is added to the menu.

Are any dishes added to the menu?

$$3x + 3 + 4 + x + 1 = 40$$

$$4x + 8 = 40$$

$$x = 8$$

30 needed
No, A=27
B=7

What fraction of the people that liked dish A, **did not** like dish B?

$$\frac{24}{27} = \frac{8}{9}$$