Answer key

The method: Right-triangle ratios

sin A = opposite ÷ hypotenuse, cos A = adjacent ÷ hypotenuse, tan A = opposite ÷ adjacent.

opposite 20, adjacent 21, hypotenuse 29: $\tan A = \frac{20}{21}$

$\tan A = \text{opposite} \div \text{adjacent} = \frac{20}{21}$

opposite 5, adjacent 12, hypotenuse 13: $\cos A = \frac{12}{13}$

$\cos A = \text{adjacent} \div \text{hypotenuse} = \frac{12}{13}$

opposite 20, adjacent 21, hypotenuse 29: $\sin A = \frac{20}{29}$

$\sin A = \text{opposite} \div \text{hypotenuse} = \frac{20}{29}$

Problems 1 and 2 worked out · Version 0A

opposite 7, adjacent 24, hypotenuse 25: $\tan A = \frac{7}{24}$

$\tan A = \text{opposite} \div \text{adjacent} = \frac{7}{24}$

opposite 9, adjacent 40, hypotenuse 41: $\sin A = \frac{9}{41}$

$\sin A = \text{opposite} \div \text{hypotenuse} = \frac{9}{41}$

Right-triangle ratios · Version 0A

1) $\frac{7}{24}$ 2) $\frac{9}{41}$ 3) $\frac{40}{9}$ 4) $\frac{12}{13}$ 5) $\frac{24}{25}$ 6) $\frac{8}{17}$ 7) $\frac{24}{7}$
8) $\frac{12}{13}$ 9) $\frac{21}{29}$ 10) $\frac{40}{41}$ 11) $\frac{21}{29}$ 12) $\frac{20}{29}$ 13) $\frac{35}{37}$
14) $\frac{35}{12}$ 15) $\frac{12}{35}$ 16) $\frac{12}{5}$ 17) $\frac{9}{41}$