Trigonometry Ratios Assessment

ACMMG223 – Using ratios and similarity

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Professional Development from Texas Instruments

Name: _____

Score: _____

Teacher: _____

Assessment | TI-Navigator | Student | 30 min

Q.1. Which of the following represents the **sine** ratio?

a) $\frac{opp}{hyp}$ b) $\frac{adj}{hyp}$ c) $\frac{opp}{adj}$ d) $\frac{hyp}{adj}$ e) $\frac{adj}{opp}$

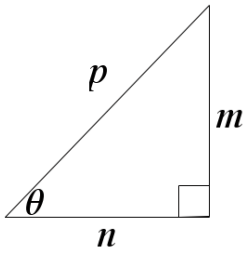
Q.2. Which of the following represents the **cosine** ratio?

a) $\frac{opp}{hyp}$ b) $\frac{adj}{hyp}$ c) $\frac{opp}{adj}$ d) $\frac{hyp}{adj}$ e) $\frac{adj}{opp}$

Q.3. Which of the following is true for angle θ ?

a) $\sin(\theta)=\frac{m}{n}$ b) $\sin(\theta)=\frac{p}{n}$ c) $\sin(\theta)=\frac{p}{m}$

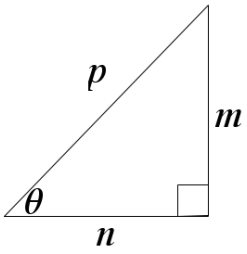
d) $\sin(\theta)=\frac{m}{p}$ e) $\sin(\theta)=\frac{n}{p}$



Q.4. Which of the following is true for angle θ ?

a) $\cos(\theta)=\frac{m}{n}$ b) $\cos(\theta)=\frac{p}{n}$ c) $\cos(\theta)=\frac{p}{m}$

d) $\cos(\theta)=\frac{m}{p}$ e) $\cos(\theta)=\frac{n}{p}$



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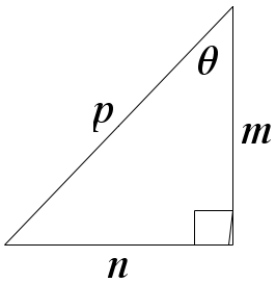
Q.5. Which of the following is true for angle θ?

a) $\tan(\theta)=\frac{m}{n}$ b) $\tan(\theta)=\frac{n}{p}$ c) $\tan(\theta)=\frac{p}{m}$

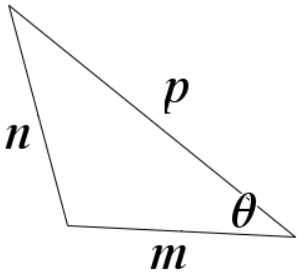
d) $\tan(\theta)=\frac{m}{p}$ e) $\tan(\theta)=\frac{n}{m}$



Q.6. Which of the following is true for angle θ?

a) $\tan(\theta)=\frac{m}{n}$ b) $\tan(\theta)=\frac{n}{p}$ c) $\tan(\theta)=\frac{p}{m}$

d) $\tan(\theta)=\frac{m}{p}$ e) None of these



Q.7. A right angled triangle has sides *a*, *b* and *c*. If $\tan^{-1}\left(\frac{a}{b}\right)=60^\circ$ then the sides lengths from smallest to largest would be:

a) *a, b, c* b) *b, a, c* c) *a, c, b* d) *b, c, a* e) *c, a, b*

Q.8. For a given right angled triangle: $\sin(\theta)=0.3$. The triangle is then enlarged by a factor of 2. Which statement is true for the new triangle?

a) $\sin(\theta)=0.15$ b) $\sin(\theta)=0.3$ c) $\sin(\theta)=0.6$ d) $\sin(\theta)=1.2$ e) None of these

Q.9. For a given right angled triangle: $\sin(\theta)=0.3$. The **angle** θ is doubled. Which statement is true for the new triangle?

a) $\sin(\theta)=0.15$ b) $\sin(\theta)=0.3$ c) $\sin(\theta)=0.6$ d) $\sin(\theta)=1.2$ e) None of these

Q.10. A right angled triangle has sides *a*, *b* and *c*. If $\tan^{-1}\left(\frac{a}{b}\right)=30^\circ$, which of the following would produce the smallest value:

a) $\frac{a}{b}$ b) $\frac{b}{a}$ c) $\frac{a}{c}$ d) $\frac{b}{c}$ e) $\frac{c}{b}$

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