****

Name the Film

**Solving Trigonometric Equations**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M |
| $$90°$$ | $$225°$$ | $$45°$$ | $$285°$$ | $$120°$$ | $$315°$$ | $$300°$$ | $$-45°$$ | $$30°$$ | $$105°$$ | $$255°$$ | $$0°$$ | $$320°$$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| $$150°$$ | $$15°$$ | $$75°$$ | $$180°$$ | $$240°$$ | $$135°$$ | $$330°$$ | $$-60°$$ | $$60°$$ | $$270°$$ | $$360°$$ | $$210°$$ | $$-30°$$ |

Solve each of the equations in the interval $0°\leq x<360°$, link your solutions to the table above and unjumble the letters to find the name of a film:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Equation | $$\sin(x=0.5)$$ | $$\cos(x=-0.5)$$ | $$tan^{2}x=3$$ | $$\sin(x)+\cos(x)=0$$ |
| Solutions |  |  |  |  |  |  |  |  |  |  |
| Letters |  |  |  |  |  |  |  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Equation | $$2 sin^{2}x-3\sin(x)+1=0$$ | $$3 cos^{2}x-sin^{2}x=2$$ | $$2 sin^{2}x-5\cos(x)=2$$ |
| Solutions |  |  |  |  |  |  |  |  |  |
| Letters |  |  |  |  |  |  |  |  |  |